NATIONAL TRANSPORTATION SAFETY BOARD
VERBATIM TRANSCRIPT OF INTERVIEW WITH
QC
STS1(SS) ROBERTO REYES, JR., USN

CONDUCTED AT COMMANDER, SUBMARINE SQUADRON 1 CONFERENCE ROOM, 822 CLARK STREET, BUILDING 661, PEARL HARBOR, HAWAII

ON 16 FEBRUARY 2001

MR. TOM ROTH-ROFFY: Good morning. My name is Tom Roth-Roffy. I am an accident investigator with the National Transportation Safety Board. Ah, the National, I and several others with the National Transportation Safety Board are here investigating the collision between the USS GREENVILLE and the fishing vessel EHIME MARU that occurred on February 9th 2001. Also joining in today's interview are representatives from the United States Coast Guard and United States Navy. For your information the National Transportation Safety Board is an independent federal agency responsible for investigating transportation accidents in the United States. The purpose of the safety board's investigation is determine the cause of marine accidents and to make safety recommendations into preventing the accident or similar accidents. In our investigation we will make no effort to assign blame for the accident nor do we have any legal authority to penalize any person involved in the accident. Our accident, our investigation is strictly a safety investigation and not a legal investigation. Ah, if you desire you may have another person assist you with this interview. Would you like someone to assist you or do you think you can make it through on your own?

WIT: I think I can make it on my own.

MR. ROTH-ROFFY: Okay. Okay, again as I mentioned joining me in the interview will be some other folks and I would like at this time for them to introduce themselves.

MR. WOODY: Bill Woody from NTSB.

MR. BARRY STRAUCH: Barry Strauch from the NTSB.

LT HEDRICK: LT Doug Hedrick, SUBPAC.

LT(jg) KUSANO: LT(jg) Ken Kusano, United States Coast Guard.

LT JOHNSON: LT Charlie Johnson, United States Coast Guard.

LCDR SANTOMAURO: LCDR Rich Santomauro, SUBPAC.

WIT: Hello.

MR. ROTH-ROFFY: So then, thank you for coming Petty Officer Reyes. What I would like to ask you to do right now is try and remember back to Friday morning February 9th. Try to visualize in your mind what you were doing. Uh, on the morning of February 9th. And uh, I would like you to start from the time the submarine got underway. What you were doing, ah what people told you, what you told other people, what you saw. Please provide as much detail as you can. I would like you to give me a narrative recollection of what you, of everything you remember from that morning until a period of time after the collision occurred. And I would like again for ah the interviewers not to interrupt that you just continue with your narrative start to finish until you are done. Then we will ask you more detailed questions.

WIT: Okay.

MR. ROTH-ROFFY: Okay. Ah, start a little bit before the ship got underway. Probably when you came aboard in the morning, what time you got there. And then what you did for preparation for getting underway and proceeding to sea. You know, the full, as much detail as you can.

WIT: It was ah, it was a pretty early day for us. We all mustered on the boat around five o'clock. I can't, I think it was five o'clock. Pretty sure it was, it was really early. And ah, it was just like any other underway. Ah, getting the boat ready to go out to sea, we ah, make sure all the pre underways are done, have to do a topside survey. Make sure everything is buttoned down, you don't want any loose gear adrift. You don't want anything running around all over the place. Make sure it is a safe condition topside so that line handlers don't slip on anything and fall. Um, no rattles on the ship so we do a topside survey um, with a rubber mallet, whatever. Ah, it was a normal day. It was a normal day we ah, I, I was ah, heading down to the boat. No problems went into sonar. Made sure that the pre underways were done. Made sure the guys were all on station ready to go. And made sure, ah, I was just double checking that everything was good. And ah, that we had everything we needed. Made sure we had the logs available, blank sonar logs, made sure that the headphones were on the stacks so that we could go out to sea. Um, charts and ah, made

sure the maneuvering watch was set. That is pretty much it. There, once the maneuvering watch is set we were out to sea. We took off and ah, civilians were on board. And we did a lot of hi how you doing, and on the surface they really couldn't appreciate sonar because they can't hear much because we are on the surface and the sphere is engulfed in all the hydro, hydrodynamic flow of the water over it, so they really can't see to far with it, but ah, or hear much other than waves slap. They don't know what to listen for and after we dove, they would come in and we played biologics tapes for them, and they heard them and whatever and they thought that was pretty cool. There weren't, there wasn't a lot of biologics out there. None of the cool stuff rather. All we had was shrimp, no whales, everybody likes whales. Whales and dolphins. Um, we had our normal watch, no problems. Ah, tracked whatever trawlers we had. And ah, I got relieved for lunch. Once I was relieved, I had my lunch and walked around a little bit. Said hello to some of the guests that were onboard. Chief of Staff was my first CO, I ah, I made it a point to say hello and whatever, but unfortunately never got that chance. Um, and I went up to sonar because I, I typically get cold underway, I still carry my jacket here. I don't do to good in the air conditioning. I went up to grab my jacket, cause on the inside, in the inside pocket I had photos of my wife and baby. And ah, we were making preps, preparations to go to periscope depth. And ah, there were civilians in there at this time. And ah, they were speaking and whatever, I didn't think it was a good idea to be talking to the operators at that point. So, I was like this is sonar, and I kinda hurried them up. Not to distract the operators and whatever. Once I got done with them, they got ushered out to control, because that was where the action was going to be, that is where the actual operation was going to take place, to see through the scope, or the pav vie, and watch us go up to periscope depth and eventually go deep and then blow. And ah, why we're going up to periscope depth, once they said "make preparations to go to periscope depth", I stood behind SN Rhodes. And I kinda like to rib all the guys, I guess that I am the jokester or whatever. "Do you know what you are doing there". And SN Rhodes is the most junior guy on the boat. And ah, I said "Do you know what you are doing", and he's like "Yeah, we are going up to PD". You know, you know how to do it? He is like "Yeah, look off the bow". "Okay, so lets see if you know what you are doing". So, I stood there with him. And ah and he is looking, looking, and looking and we are on our way up now. So, I stood behind him while we are going up, to make sure he was doing it right, so we wouldn't be in trouble or whatever. We made it up to periscope depth and look around, no close contacts was the report that I

heard. And ah, heard it twice actually, heard it twice. Heard it from the ESM watch and heard it from the OOD. And ah, they say, "Okay, cool, emergency deep". Now we went emergency deep to get the boat down really quick and ah, at that point the sup Petty Officer McGiboney is like "Hey do me a favor, would you mind grabbing Petty Officer Holmes, I need to go to the head". I go, "Okay, fine no problem". And ah, I walk out and I went right into the cruise mess, because I figured, because that's where everyone was gathering around, that's where most of the crew was. And he wasn't there, so I went down the ladder and into the torpedo room and right away I felt the blow. And I was like "ah man, I am going to miss it". There is a point while you are doing the blow that the boat is descending that you kinda of get a little lift off the ground. It is not really zero G's, but I guess that is the closest that we are going to get on a sub. And ah, I wanted to feel that, it is kinda of cool. And ah, I run up to sonar by the time I got to the forward sonar door we had a pretty good angle. And ah, I knew it was just a matter of a few seconds before we actually started to come down. And I made my way into the aft, in through sonar and into the aft door and I braced myself. And ah, and I was looking at the contact picture and there was nobody there. I am like "cool, this is going to be nice". And ah, I never felt the down, the down drop and I heard a sound that I thought was the bow plane slapping the against the water. But I knew that wasn't right. And ah, I said, I said "What the hell was that". I said "That wasn't that nice". And ah, all I heard was "Oh my God", I heard "Oh my God, Jesus", and I stepped right out into control. And the captain was on the scope. First words out of his mouth were "IWA JIMA". And my first thought was "Oh, shit". And I ran right back into sonar. Now in the old days, we had we had a marine carrier IWA JIMA and I am thinking that we just hit a bunch of marines. But there was nothing on the display that we didn't have before. I am like where did this guy come from. You know this thing is huge. How could they not see it. And ah, and then he said "Fisheries High School", and I was like "What". And I run back into control. And I look on the ah, I look on the ah, perivis and I see what I thought was a tug. And ah, he goes that they are taking on water. We are going to render assistance. That is all I heard. That is all I needed to hear. I went on watch, I ran down to the man overboard bag. And I started ushering some of the junior guys around. And we got suited up right away. By the time I got to the cruise mess they had already leaned over to the port side and started to go nose up. And I looked at the chief and ah, he turned off the perivis and asked the civilians to please step into the torpedo room. So that we could prepare the cruise mess and wardroom for

rendering assistance. And they right away got up and went to the torpedo room. And ah, we got suited up and we were just waiting to go, we were waiting to go they were just taking too much water over the side and divers were going to go out the sail, down the ladder and on deck, but there was already a Coast Guard and I have no concept of what the time was, I mean things are happening this fast and we are moving as slow as molasses. And ah, I knew that there was a ah, Coast Guard Helo there already. I am like, lets go, lets go. And ah, we didn't get the word to go up, it was too rough. And ah, that is it. That was my part. I really ah, I mean, that is all I can remember, I mean those are the specifics, I don't know.

MR. ROTH-ROFFY: Thank you for that, Petty Officer Reyes. Where you on the watchbill for the underway and what were your assigned position?

WIT: For the watchbill, I was on the watchbill for the underway. I was the sonar operator for the underway period. Now, when this all went down, I was off watch. I just happened to come up and get my jacket.

MR. ROTH-ROFFY: Okay. What was your assigned watch hours? What time were you supposed to be in sonar on watch?

WIT: I had the morning watch.

MR. ROTH-ROFFY: What time was that about?

WIT: It was a weird day ah, we were only going to be out six hours, so I had the first three or whatever. The first three hours, so.

MR. ROTH-ROFFY: And what, what times would that be?

WIT: Lunch went down roughly at 11:30, ah so, so from 11:30 back, so ah, we left, so from like eight to eleven, because the maneuvering watch was still stationed. And I was supposed to be on the maneuvering watch bill, my job was to be in sonar, so I was up there from the maneuvering watch until I was relieved for lunch.

MR. ROTH-ROFFY: And after lunch you returned to the sonar room, why did you do that?

WIT: To pick up my jacket.

MR. ROTH-ROFFY: And you picked up your jacket and did you leave the sonar room or did you remain in the sonar room?

WIT: I picked up my jacket and I was messing around with SN Rhodes. And then we were making preparations to go to periscope depth and ah, I stayed for the periscope depth evolution.

MR. ROTH-ROFFY: So you were there on your own initiative, you were not actually on watch or required to be there.

WIT: CORRECT.

MR. ROTH-ROFFY: And what was your function during your watch, say between 0800 and 1100, say what position did you, or duty did you perform?

WIT: I sat at primary broadband. And ah, my job was to ah, detect, class, track, classify contacts as they came across.

MR. ROTH-ROFFY: And who relieved you at 1100 when you went for lunch?

WIT: There was Petty Officer Bowie. Petty Officer McGiboney was the oncoming Sup and SN Rhodes.

MR. ROTH-ROFFY: And who actually relieved you at your watchstation?

WIT: Petty Officer Bowie.

MR. ROTH-ROFFY: Could you describe the contacts that you held during your watch period please, and if you need to refer to the logs there, just step us through various contacts and what you acquired and lost?

(The witness reviewed the logs)

WIT: Sure. From the very beginning, sierra 2, 2 through 7 were all either merchants or tankers. There was one contact sierra 7 that all they have here is surface on the logs, because we couldn't get any screw blade information. Um, let me see, some of them were going really quick, light crafts 500 plus RPM's. Um, and then we got relieved right here. We got relieved about 2140 Zulu. Ah, And then the rest of them don't have any any solid, any solid classification as far as whether they are trawlers or merchants or anything like that the guy just put surface. So there was surface ships out there. This is all on

that. Yeah, same thing. They have a couple in there as small merchant, they were all surface crafts, according to the logs. This is way later into the night. Yeah, they were all classified as surface. Surface or merchant like craft.

MR. ROTH-ROFFY: You mentioned ah, there was no screw blade info on these contacts. Could you describe that, what does that mean and how that information is acquired? And how that designation or classification is made for the contacts?

WIT: Screw blade information is ah, is all related to their propulsion. Ah, what kind of, how many shafts does this particular contact have. Ah, how many blades on each propeller. All this information is derived off the classification from stack. On here, the broadband energy modulated and then ah, is put on a display that we can see. And ah, you can actually count the number of blades on the screw. And which ever one is highlighted, that ah, for example you have a four bladed screw, as the first blade goes through the water that is the initial blade ah, shaft line. The second, the third, and then as the fourth comes through it is evenly balanced if it is a good screw it will hit in the same spot the first one hit. So now that first line, which is actually the fourth is highlighted more, it is more predominant. That gives you ah, that gives you a good picture of what this is. And that's how you can tell and many blades are on each propeller. And that's basically what the class function does for us.

MR. ROTH-ROFFY: And which watchstation is responsible? Was that your duty to establish classification on the surface contacts?

WIT: No, that duty falls under workload share operator. That ah, that primary broadband, that guy's sole purpose is to detect class, I mean detect and track contacts. He is primary safety of the ship, he is going to find all the contacts and he is going to keep tabs on who is where and what they are doing. And then right next to him, is the workload share operator. He also has passive broadband, but he can assign and deassign the class function to get screw blade information on someone. And ah, the class function well, we ah, we don't have a full, we don't have a sonar suite a full busy one or a Q-10 sonar sweep. We have a hybrid. We have 50/50, that is what it is. We have the time share. That is what we have on our displays. So, unfortunately, the class function cannot be left up all the time. And we deassign it, but safety of the ship is the primary function of both of these guys.

MR. ROTH-ROFFY: And you know that this screw blade information was not indicated for these surface contacts? Was that unusual or is that typical?

WIT: No, that, that is unusual. Because just an hour or two before the screw blade information for several other contacts on each page for example see right here Sierra 6, you have him here on this page and you got screw blade information on him, whatever information you have on him should have carried over on him to at least the next page and try to update that information, as much as possible if he has sped up, slowed down, or whatever. You want make sure he is still doing the same thing. I try to go back to it at least a half hour, every half hour, 30 minutes to verify what we have on this guy or any contact that we have.

MR. ROTH-ROFFY: Do you have any idea why there was no screw blade information for those contacts?

WIT: No. Either, either they couldn't get any information or the operator just didn't get it. One of the two.

LT HEDRICK: LT Hedrick, you weren't in the sonar, so you really can't make that evaluation, correct? I mean, you weren't in there when they had those contacts?

MR. ROTH-ROFFY: No, sorry, I am just referring to those contacts during his watch.

WIT: Oh Yeah.

LT HEDRICK: I am sorry.

WIT: During my watch, yeah.

MR. ROTH-ROFFY: During your watch you had - - - -

WIT: No, during my watch if we had screw blade information it went in the logs.

MR. ROTH-ROFFY: Okay for all the surface contacts Sierra 1 through, how many? How high did your Sierra count go?

WIT: What did I say. Till 2140. That is when the next log keeper came in. And that went as high as ten.

MR. ROTH-ROFFY: So, four - - - -

WIT: And they got, and they got screw blade information for Sierra's ten and eleven. But anything after eleven, it looks like they didn't get any.

MR. ROTH-ROFFY: Okay.

WIT: No, they didn't. They didn't up until Sierra 17. Which was on the 10th, which was the next Zulu day.

MR. ROTH-ROFFY: Okay, what I would like to do at this time is pass the questioning to the next interviewer.

MR. WOODY: Bill Woody, NTSB. Just let me start by asking you the names of the people you were on watch with. Who was on watch with you?

WIT: Ah, Petty Officer Holmes was the supervisor, we had ah Petty Officer Emmons he was also in there.

MR. WOODY: How is that spelled?

WIT: E-M-M-O-N-S. Ah, There was also Petty Officer Anderson, he was out on the fathometer. This is all during the maneuvering watch too. Um, but during my regular watch it was myself, and Petty Officer Emmons, and the sonar supervisor, Petty Officer Holmes.

MR. WOODY: Petty Officer Holmes. So, it was Petty Officer Emmons was on the workload?

WIT: Yes.

MR. WOODY: One thing I wasn't clear about, you did say that, that, using the ah, demodulation techniques that get shaft and propeller, how about RPM'S, can you get that also?

WIT: Yes. You do calculations and you can get, you can get engine RPM's - - - -

MR. WOODY: Describe the calculations just briefly?

WIT: Ah, can I do that sir.

MR. WOODY: It is not essential. Okay.

WIT: Okay, it is easy. Ah, everything is 60 cycle. Here in the United States we run 60 plants, so the noise is demodulated down to 60 hertz. You take that noise and whatever the shaft line is multiply it by 60, boom you got RPM.

MR. WOODY: Thank you. Ah - - - -

LT HEDRICK: I am sorry MR. Woody I am going to have to interrupt you. This is LT Hedrick. Um, The demodulated noise information, um is a frequency. So it is noise or cycles per second. If you take that per second information and multiply it by 60 to get per minute. You get RPM data. It is independent of ah, of ah, current frequency whether - - - -

MR. WOODY: Exactly.

LT HEDRICK: It doesn't make a difference of what flag the vessel is.

MR. WOODY: Exactly. I was just using it as a simple calculation of his best way to tell us how simple it was.

WIT: Whatever the vast line is times it by 60.

MR. WOODY: Is there any other reason that you can think of why ah, in your experience why you couldn't get the shaft blade information?

WIT: High sea state, that would, reception path, contact presents a narrow aspect, ah, it could be a number of things, I mean ah, there are so many variables.

MR. WOODY: Is it very common that you can't get shaft blade information?

WIT: Is it common?

MR. WOODY: Yes.

WIT: Yeah, it could happen. Yes. Most of the time, if we are in deep ocean and we want to track somebody, not run from them, we are going to get information from them. But ah, there are just times, where you have been just trying to - - - -

MR. WOODY: Just compare yourself to a local area like you were in, like you were operating in?

WIT: Ah, it can be difficult, yeah.

MR. WOODY: It can be difficult?

WIT: Yes. It could be difficult. Sometimes I mean just coming right out of Pearl Harbor, everybody is just shooting out of that channel.

MR. WOODY: Okay. Now, you mentioned that the next watch came on at 2140, which is 1140, ah, and you mentioned that was ah, the supervisor - - - -

WIT: Petty Officer McGiboney - - - -

MR. WOODY: Petty Officer McGiboney.

WIT: He was the supervisor.

MR. WOODY: Who else was on that watch?

WIT: Petty Officer Bowie and SN Rhodes.

MR. WOODY: And what was their two positions, do you recall?

WIT: Petty Officer Bowie was the primary broadband operator and SN Rhodes was the workload share operator.

MR. WOODY: As ah, primary, ah was SN Rhodes an experienced watch stander.

WIT: Oh no. No, SN Rhodes like I said before he was the junior most guy on the boat ah, he just got to the boat. He is learning.

MR. WOODY: Was anyone in a oversight capacity to assist him, or?

WIT: Other than his supervisor, no. And when I took him to periscope depth, I mean yeah, you can count that as an oversight when we went to periscope depth.

MR. WOODY: You were behind him when you went to periscope depth?

WIT: Oh yes. That is something you don't play with.

MR. WOODY: You mentioned that you made sure that things were set in sonar like they should be like earphones out and so forth and one of the items you missed were charts. What use, ah, do charts do you use, do you make in sonar?

WIT: For navigational purposes on the maneuvering watch, yeah. coming in and out of the harbor here is pretty shallow water. You may not have the same the same ah depth of water on one side of the channel as you do 30 to 40 feet on each side of the submarine, so you want to make sure one ship is on course and on track based upon what the quartermaster of the watch is plotting. And they bring in, they bring in it is kinda of cool now, they bring in a little Plexiglas thing wheel and we plot our position based upon what is on that wheel. And we know where we are on the chart.

MR. WOODY: You mean you take something like ah, bearings and things from radar in sonar - - - -

WIT: Yes.

MR. WOODY: And figure out where you are and what your position is?

WIT: Yes. And we also go active on the maneuvering watch.

MR. WOODY: You go active on the maneuvering watch?

WIT: Yes.

MR. WOODY: When you go active, what are the effects on the sonar? And would you tell us if it is continuos pinging if it is high powered or low powered, whatever?

WIT: You need, you need an experienced operator to operate active. And you don't want to, you don't want to pound away - - - -

MR. WOODY: Uh-um.

WIT: because you are going to soundify the environment. You are not going to hear anything on passive broad band because now you got all this reverberation in the water. Um, so the experienced operator will go out with as little power as possible to be able to get a return either off the bottom or, all he is going to get is off the bottom, he is not going to be able to get a good return on a contact on the surface with

active. And ah, basically what we go active for is to make sure that there is no shoal water on either side or directly in front.

MR. WOODY: Do you ever pick up buoys using your active sonar?

WIT: You may get lucky.

MR. WOODY: You may get lucky.

WIT: You may get lucky.

MR. WOODY: You may get lucky.

WIT: You may get lucky, but uh, you can actually hear the buoy chains better than you can get an active return.

MR. WOODY: How about ships that might be coming in and out of port?

WIT: No, not really. Its, no. You have too much bottom reflection and the sound just goes everywhere. I mean you can train it to go and look down a specific bearing, for example I know the tug is right in front of us all the time prior to going out, you try to get a ping on this guy and you can't. You can't just because you can't.

MR. WOODY: Is that because of shallow water?

WIT: Shallow water. Shallow water the sound is just funneled out.

MR. WOODY: How deep does the water have to be for you to get a ping on a sub? I mean on the tugboat?

WIT: That is also a variable. It just depends. It depends on the environment. It depends on sound conditions in the ocean, it just depends. And coming in and out of the channel you don't, you don't have a good, a good picture of what the environment is like, because you have so much shipping density there. You have so many ships coming in and out of there; it is just noise everywhere. There is noise everywhere. You get noise from buildings; you get noise from the highway, all of that is broad band noise. And it is all going in the water.

MR. WOODY: If I hear you correctly, then you are saying that it is primary use for a sounding device to look for shoals?

WIT: Yes.

MR. WOODY: Nothing more than that.

WIT: Yes. It is not used to track a contact on the surface, no.

MR. WOODY: I was kind of interested in why you ah, where able to come to sonar to be there for the ah ascent to periscope depth? Where you asked to come in or was it something that you just happened to be there or what?

WIT: No, I just went up, just like I said, I went up to go get my jacket because I was running around the boat, the submarine is an air conditioned environment. It is a controlled climate and they like to keep it cool because we have a lot of computer equipment on board. And ah, I, I get cold.

MR. WOODY: If you hadn't gone to get your jacket who would have been standing behind Petty Officer, who was it?

WIT: SN Rhodes.

MR. WOODY: SN Rhodes.

WIT: It would have been the sonar supervisor.

MR. WOODY: The sonar supervisor.

WIT: Petty Officer McGiboney.

MR. WOODY: And you walked in. Ah, did you do that voluntarily or did ah, did ah Petty Officer McGiboney ask you to stay and do it?

WIT: When he saw that I came in he ah, and that I was ribbing Rhodes he was like just do me a favor and just keep an eye on him, and I was like okay, you know it, it was ribbing him, but it was making sure that he was doing his job the right way, teaching him the right way, ah, a guy can read but so much and ah, try to absorb this information, you can have all the technical knowledge and know how to do something on paper, but it is much different when you see it in front of you for real. For example, driving a car. You can read a manual and you know that red means stop, green means go, but unless you know how much gas to give the accelerator or how much pressure to put on

the brake, that car is going to do what it wants to do, you can't control it. It is kinda of like off the beaten path, but you got to do the job in order to know how to do the job. Its hands on really.

MR. WOODY: You said that he is the newest person onboard, but how long has he been in sonar shack?

WIT: He ah, he got to us during SRA, that is an availability period in the shipyard. And um, he didn't do much work for sonar, sonar wise, other than being the junior guy preserving the ship and whatever ah, but ah, he did go out with us on what they call out here an EASTPAK, that is sometime out in the eastern pacific. Uh, like I said he is in the learning process there.

MR. WOODY: Okay. Very well. I think I heard you say that you heard two noises. The first noise you characterized as something like bow planes hitting the water and you know that that was not the case on your ship. How was the second noise? How would you characterize that?

WIT: The initial noise I heard was a crack. It was a crack; it was like a slack.

MR. WOODY: Alright.

WIT: And ah.

MR. WOODY: The second noise?

WIT: The second noise, I felt a shutter, kinda of, we came down, bow was coming down at that point, and I'm like that is not right. I knew it wasn't right, it was a shutter. And um, it's not right. I stepped out into control and the captain was on the scope.

MR. WOODY: Do you sometimes ah, get a noise when the bow comes down? Well, when you make an emergency surface the bow comes out of the water, the bow comes down, is there any noise associated with that?

WIT: No. When ah, when you do, when you do an emergency blow the bow planes should be housed. And um, you know that you are going to surface. Um, I don't, and ah, there are times when you go to periscope depth and you are not going to surface. You are going to go immediately back down again and sometimes due to the

heat, due to the thermo cline in the ocean or the dive makes a mistake the ship gets sucked up to the surface. And if it is a rough sea state the bow can come up and come right back down and at that point the bow planes are going to slap on top of the ocean and it will rumble in front of the ship. And that is not supposed to happen, but.

MR. WOODY: When you came into the sonar shack, did you ah, did you start your ah, watches on the passive broadband or did you start it on the workload share, or was it a mix of the two, to get experience to become qualified?

WIT: I started on the, you see when I came in, when I actually came into the sonar world there were no hybrid sonar systems. I had the full busy one sonar system. And there was actually a dedicated operator to the passive class function. So, I took the workload share. And with the supervisor behind me and the primary operator next to me, I would ask, "Is this a contact". Yes that is a contact. Well how do I know that? Well you hear this sound. Well okay, and now you look at it on class. That is what a contact looks like. I'm like, okay, I would then try, and this is weird, because you can have another trace and listen to it and it may not sound any different to an untrained person because it is biologics and ah, it would start to print up like a contact, except that the lines are not real. It would look like; it would look like a bunch of S's. Cat scratch. Its not, its not a real contact. Unless you have that training you don't know. And that is kind of what we do with the guys in there.

MR. WOODY: Okay. That is pretty good. Look at the log book one more time.

WIT: Sure.

MR. WOODY: When you went off watch, were where the contacts held by your watch? When you were relieved at um, 1140 or 2140, excuse me?

WIT: 2140, it shows that they gained Sierra 10. So I would say up to 9. And Sierra 9 went into the baffles bearing at 043.

MR. WOODY: Sierra 9 up to the time you were relieved at 2140, is when they gained - - - -

WIT: Is when they gained Sierra 10, at that point.

MR. WOODY: Okay. So were you still tracking one of the contacts?

WIT: What was that sir?

MR. WOODY: Whatever contacts were you still tracking at that time?

WIT: They had ah, - - - -

MR. WOODY: On your watch.

WIT: Oh, on my watch. What ones were we tracking?

MR. WOODY: Still tracking? You may have to go back and see which ones of them had faded.

WIT: Yeah we had, let me see, we had Sierra 7 going through in the baffles at bearing 236, we gained Sierra 8 bearing 198, and then Sierra 8 faded out bearing 201. The last one that we gained was Sierra 9 and he went into the baffles bearing 043. That was the last I saw, they didn't have any contacts.

MR. WOODY: Except Sierra 10?

WIT: No Sierra 10 was, ah, yeah they gained Sierra 10.

MR. WOODY: Just that one.

WIT: Yes, right at 2140.

MR. WOODY: Okay. How, how long are the current sonar equipment that you have now would it require someone like ah SN Rhodes to become a qualified sonar operator?

WIT: That's a, that's kind of tough.

MR. WOODY: Assuming that he is a class "A" School graduate? And he also has qualifications in submarines to take care of. What kind of time frame are we looking at?

WIT: It really depends on the individual. It really really does, because some, class "A" School is a misnomer, that is just a fundamental school. Don't think of it as "A" being that it is the "A" number one school. No, it is the fundamental school. Basically all they get, is hey this is sonar. This is what it is. This is what you are going to do. Um, they get taught the

basic physical of sounding, things like that. So when they come to the ship they try to apply this and it is not what it really is, they are just getting the fundamentals. When they actually see what it is, it is much different. SN Rhodes, he is okay. How long is it going to take him to qualify, right now he's, he's struggling a little and in light of the accident, I don't know. I don't know what it is going to do to him. I mean ah - - - -

MR. WOODY: I was asking the question looking for the typical answer. I appreciate the input. Typically is there a range of months from um, say 6 months to - - - -

WIT: To be a really, really good operator and understand everything about 6 months.

MR. WOODY: About 6 months?

WIT: You should know, you can teach somebody on how to assign a tracker and put a tracker in an automatic tracker file, an ATF, you can teach somebody to do that in about 10 minutes.

MR. WOODY: Please explain what tracker means. Please explain what tracker means?

WIT: Tracker?

MR. WOODY: Yes.

WIT: Okay. Ah, - - - -

MR. WOODY: How you have used it?

WIT: You get a, You get a, You get a trace on the display. You have to follow this thing. In order for us to follow it and know where, where it is at all times to send information to fire control, you bring up the track function. It doesn't take anything away from the display and you assign, assign a tracker to it. Ah, just bring up audio tracker and bring your cursor to the trace and you assign a tracker "A", "B", "C" or "D" to it.

MR. WOODY: Is that the numbers you have "A", "B", "C" or "D"?

WIT: "A", "B", "C", or "D"; and "H" and "I", for another array.

MR. WOODY: "A", "B", "C", "D", - - - -

WIT: "A", "B", "C", "D", or "H" "I". That's why on right here on the logs you see tracker. "D" "B" "C" "B" "D" "C" "D" "B".

MR. WOODY: I understand. Thank you. I think that is all the questions I have at this time. Thank you.
MR. STRAUCH: I am Barry Strauch. Um, I just have a few questions for you. How long, can you tell us a little about your background? How long have you been in the navy? What your assignments have been? What you have done?

WIT: Let me see. I am a native of New York and I joined the Navy in 1980, February of 89, so this year makes 12 years, this month makes twelve years in the Navy. I went through Basic Enlisted Submarine School and from there I went to California. No, I am sorry. I went to Basic Training in California first and then from there, right in California, in San Diego. I went to basic electronics school, digital electronics training. And from there they flew me out to Groton, Connecticut for Basic Enlisted Submarine School. From there, they flew me back to San Diego, where I attended my "A" School, my fundamental school and then "C" School on the Q5 system. And from there I flew to Groton, Connecticut for my first submarine, which was the USS SAN JUAN, which is identical in all respects to the USS GREENVILLE, with the only exception that the USS GREENVILLE is not 100 percent equipped to surface threw the ice at the polar cap and we did that on the SAN JUAN. Um, I stayed 5 and half years onboard the USS SAN JUAN. I qualified everything up to sonar supervisor on the USS SAN JUAN and then I was eventually command advanced to the present rank that I hold, first class from there; I went to recruiting duty in New York City and I spent three and half years there. And then another year and a half in Groton, Connecticut getting back up to speed on all the, they sent me back to school to learn everything that I had missed that happened in the world. I mean, Russia fell it crumbled and now they are not our primary threat and so basically getting me tactically up to snuff. I reported onboard the USS GREENVILLE in August. And that was for the ship yard period and I took it sea, I took the GREENVILLE to sea for the first time, whatever that EASTPAK was. I am currently working on requalifing on sonar supervisor.

MR. STRAUCH: I am from Brooklyn by the way.

WIT: Oh, cool.

MR. STRAUCH: And you had said that you had dealt with civilians, you had talked to them and greeted them?

WIT: Yes. Yes.

MR. STRAUCH: How many civilians were there?

WIT: There were a few. I would have to say 15, 15 or so.

MR. STRAUCH: When you have civilians onboard how does this number compare, more or less, or about the same?

WIT: It depends. It really depends. I have seen it as high as 30, but you know, it depends, it really depends on what the evolution is. I mean there are times that we take civilian riders at to sea, because they are the technical, these are the guys that put the ship together. So you may have a whole berthing area full of these guys because they have to test the systems. So, it is not uncommon to have civilians underway.

MR. STRAUCH: Where any of these civilian technically orientated?

WIT: I don't know. I didn't, I didn't, they really had more questions for us. Like what's this and what's that. I mean it was really a show and tell kind of thing.

MR. STRAUCH: Did they touch anything?

WIT: Nothing that we didn't know about. I mean, we I mean in the bathroom you have to go and show them how to use the bathroom because it doesn't, it is not a regular toilet like, like at home. It is a series of levers and things that you have to utilize, but they did not touch anything to operate the ship. Other than what as been put out in the press already.

MR. STRAUCH: Um, You said that you went off duty to have lunch and came back, and after lunch you went back to get your jacket. And at what point was it that the collision occurred, when you felt the shutter and everything?

WIT: The collision was after we ah, well after we went to periscope depth safely we did what is called an emergency deep. It is not an uncommon procedure; it is just quickly getting the ship under the water to a specific depth determined by the officer of the deck or commanding officer already. And we got to that depth and at that point they blew. After the emergency blow is when the collision took place.

MR. STRAUCH: And how long after you had gone up to get your jacket did all this occur?

WIT: Ah, let me see. I stayed in sonar for the periscope evolution. And I left sonar to get the supervisor a head call. Ah, they started blowing, I mean it could be, I'd say anywhere between 10 to 15 minutes from the entire time that I stepped in to it actually happened.

MR. STRAUCH: Now you went back to get your jacket you said. You were not on duty at that time?

WIT: Right, that is correct.

MR. STRAUCH: So you, did you have a look as to what was going on that would have been equivalent to what you would have had, if you would have been on duty?

WIT: Do you mean that I got a look at the screen and get a contact picture?

MR. STRAUCH: Yes.

WIT: Yes I did, cause I was there for the periscope depth evolution.

MR. STRAUCH: So what you saw at that point would have been no different than had you been on duty?

WIT: Right.

MR. STRAUCH: And you didn't see any any anything related to this particular vessel?

WIT: Oh no. Oh no there wasn't anything classic about it at all.

MR. STRAUCH: And you said that ah, it would be unusual that there would be no contact?

WIT: I said that it would be unusual that there would be no contact?

MR. STRAUCH: Right. I think that was your word "unusual".

WIT: No, it would be unusual to not pick up a contact.

MR. STRAUCH: Okay. Alright. So this would fall under that category of unusual?

WIT: Oh this is weird. This is unlike anything I have ever seen. I mean that I have never experienced anything like this.
MR. STRAUCH: In what way?

WIT: Contacts just don't materialize out of the air. We were tracking from what I see in the logs, two contacts, Sierra's 12 and 13 and Sierra 10 was in the baffles and from what I saw of the contact picture these guys had extremely, not extremely, but they had a low bearing to the left. When we cleared baffles, we cleared baffles to the right. And we came up on a southerly course, I don't know the number, I don't know where we came up. We went up to periscope depth and there was nothing there. There was absolutely nothing there. They didn't see anything visually. Um, ESM report no close contacts. I got a warm fuzzy, I was like yes, we are good. I mean, it's always a hairy situation because sometimes you come up and there may be a fishing vessel there, trolling. But you would here is winches, you would hear his chains, you would hear, you would hear the guys running around stomping and dropping stuff on the deck. We heard nothing. We heard nothing, and ah here comes the bump. I said that was not right. And I looked on the display and they still had these contacts in ATF, and I was like what the hell was that, you know and unfortunately the rest is history.

MR: STRAUCH: ATF is Automatic Tracking Functions?

WIT: Automatic Target Follow.

MR: STRAUCH: Target Follow. Close enough. Um, could you explain what that is?

WIT: Um, The computer zeros in on the sound, the sound energy coming from the contact and it knows where the contact is and it automatically follows, your ah, wow, that is a good question. It ah, the computer locks into the sound source and it won't let it go, it has targeting algorithms in it, it will follow this sound source wherever it goes up until it goes into the baffles and in which case you have to deassign it because now if it goes into the baffles you are sending erroneous bearings to fire control, so that is not good.

MR. STRAUCH: Okay.

WIT: You are going to end up, if there was a warship that you wanted to sink it would be shooting own ship.

MR. STRAUCH: And this is standard that you use ATF?

WIT: That, yes.

MR. STRAUCH: All the time?

WIT: The only time you would not use ATF is if you have a very very low signal to noise ratio contact, SNR contact. The guy, is moving and he is doing everything but he, you can't hear, he is not loud at all and the tracker is wondering all over the place and you don't want to send bad bearings back to fire control, so you would put the tracker up on the display and you would buzz bearings to this contact. That's what, I mean you are still tracking him, but not automatically. You are still sending good bearings to fire control.

MR. STRAUCH: So the fact that this target was missed. Meant that ATF failed to pick up on the sound - - - -

WIT: No.

MR. STRAUCH: Or the sound wasn't there?

WIT: Oh not at all. It doesn't mean that at all. It, this target was missed, because it wasn't there. We didn't hear it. We can hear buoy chains up to 10 to 12 miles away. We can hear an idling engine up to 10 to 12 miles away. If something is making noise in the water, you are going to hear it, unless you have sound conditions that that don't allow that. But ah, this is, I cannot explain why this was not there.

MR. STRAUCH: What do you mean by sound conditions that don't allow?

WIT: If you have an, If you have, hot and cold don't mix, if you have an extremely warm layer of water above you and cold water beneath that sound is not going to get through there very very well. So you are not going to hear through this layer. Sound is being bounced off in different directions. Its not ah, think of it as a refracting light or reflective light it is just going in the other way.

MR. STRAUCH: Did you have those conditions at the time of the accident?

WIT: No, not that I know of.

MR. STRAUCH: How would you have know?

WIT: Either a depth dispersion, historical sound velocity sound profile, actually shoot a probe to determine what the sound velocities in the water where.

MR. STRAUCH: Did you do that?

WIT: No, not that I know of. I know that we didn't do that on my watch. I can't say if Petty Officer McGiboney did it on his. I honestly don't know.

MR. STRAUCH: Is it possibly that you had these unusual sound conditions, but wouldn't have known about it.

WIT: No, I don't think so.

MR. STRAUCH: When was the last time that ah, forgive me if I am using the wrong terminology, the last time a sound measurement was made, ah before the ship collided?

WIT: I don't know.

MR. STRAUCH: Would there be some kind of log that would, that would document when sound measurements are made and when they stopped?

WIT: This information is stored in the busy one system computer, but ah, there was, no.

MR. STRAUCH: The busy one system computer, what does that record?

WIT: You can, You can record any sound velocity profiles in there.

MR. STRAUCH: Is that done automatically, or does something have to?

WIT: You have to actually assign it and store this data.

MR. STRAUCH: Okay. Was that done?

WIT: I don't know.

MR. STRAUCH: Who would do that?

WIT: The sonar supervisor would do that.

MR. STRAUCH: Is that something that is done automatically or routinely, or how do you do it?

WIT: You shoot a SIBBT, or you shoot a probe whenever you want to get, whenever you want to operate in a area and you want to know what the sound conditions in that area is. For local OP areas out here, we know more or less what the environment is and the water depth is actually too shallow to change sound conditions. So, shooting a probe here in the local OP areas is not necessary, you pretty much got ISO velocity.

MR. STRAUCH: That is something you would do if you were out to sea?

WIT: Deep ocean, yes.

MR. STRAUCH: But here you weren't because you were close to shore?

WIT: Yes.

MR. STRAUCH: What other things would you have done differently than you would do if you were out at sea because you were too close to shore?

WIT: It is hard to say, I mean ah, we weren't ah, we didn't operate any differently. We didn't operate any differently than we would, the only difference was that there was civilians onboard and ah, they just wanted to see what we do.

MR. STRAUCH: You just said that you would send a sound probe out if you were in deep ocean, but you didn't do that here?

WIT: No, you would send out a probe if you get into a specific area that you want to operate in tactically.

MR. STRAUCH: I see. Um, you said the captain said IMA JIMA, um now you were in the sonar room when the collision occurred?

WIT: I was standing right by the aft sonar door, directly adjacent to the control room.

MR. STRAUCH: So you could see - - - -

WIT: The door was open.

MR. STRAUCH: So you could see and hear what was going on?
WIT: There was a curtain. There was a curtain, so I opened the curtain and I looked at the captain, who was on the periscope.

MR. STRAUCH: Um, when you heard him say this, how much time had elapsed between when you felt the shutter and him saying?

WIT: I heard the crack of what I thought was bow planes, but I knew it wasn't, I felt the shutter. I said what is that and I jumped out into control. The captain was on the scope and he said "IMA JIMA".

MR. STRAUCH: What was his manner, his tone of voice?

WIT: He was just as surprised as everyone else.

MR. STRAUCH: Um, Now did any, did ah, what was your sense as to what that meant, "IMA JIMA", and whether other people had the same sense that you did about it?

WIT: When he said "IMA JIMA", I knew it was a ship. You don't ah, on the way up to periscope depth on any vertical ascent you don't just say hey there is a contact here or whatever because it is a close aboard contact and an immediate threat to own ship you are not just going to blurt that information out, only if it is an intermediate hazard, he said because it was there and something bad happened, and ah I knew it was bad, when he said that "we are going to render assistance", he said that almost immediately. I took off like a shot to go get; I went to do what I had to do, which was render assistance.

MR. STRAUCH: Okay, I don't have any more questions. Thank you.

LT HEDRICK: Good morning, Petty Officer Reyes, LT Hedrick. I am going to start with ah, some background questions. Um, what is your role in the sonar division? Are you an LPO, ALPO, or anything like that? I am sorry leading petty officer or assistant leading petty officer?

WIT: I guess you can say that I am an assistant. I am not the senior first class within the division, so I am one of the two assistants.

LT HEDRICK: Okay. Ah, do you happen to recall how many personnel are assigned to sonar division on the GREENVILLE?

WIT: I think we have now, ah, fifteen guys now as a matter of fact, we just got a guy who reported in.

LT HEDRICK: Ah, a new guy that just reported in, was that before February 9.

WIT: After.

LT HEDRICK: Okay, so 14 personnel assigned to sonar division on February 9th, does that include your chief?

WIT: I kinda of missed him, but I would say yes, 14 including the chief.

LT HEDRICK: 14 including the chief. Of those 14 people, how many normally stand watch in sonar during an underway period? I am asking the question because sometimes the senior personnel, like the chief might sometimes stand watch in control rather than in sonar and also because sometimes junior personnel are assigned to be working on the mess decks as opposed to standing watch sonar their first few months on board.

WIT: Yes sir. Ah, the chief stands watch in sonar. He is one of three supervisors. Ah, the junior personnel we have onboard right now are not working with the cooks, mess cranking. And ah, for a period we had one, two, we had three of our operators out of sonar, because they were working on helmsman and planesman qualifications.

LT HEDRICK: For a period, we're you talking about - - - -

WIT: Prior to the underway, yes.

LT HEDRICK: Prior to the underway?

WIT: Yes.

LT HEDRICK: So your last underway that EASTPAK three of your folks were doing the planes?

WIT: Yes.

LT HEDRICK: Okay. What about this underway period?

WIT: This underway period - - - -

LT HEDRICK: Let me rephrase that question. The last time you were underway, you had 14 people assigned to sonar; one of them was a chief standing watch in control three that were assigned to the planes?

WIT: Yes, sir.

LT HEDRICK: So you had ten watchstanders standing watch in sonar, during the underway? And those 10 watchstanders manned what watch rotation last the underway, the EASTPAK?

WIT: 6 hours on, 12 hours off. 18 hour days roughly.

LT HEDRICK: Two sections? Three sections?

WIT: Three sections.

LT HEDRICK: Three sections. You didn't have any folks, port and starboard?

WIT: Ah, no. The guys that got the good deal, were the guys on the helmsman and planesman, they were four sections.

LT HEDRICK: Okay. Um, how many sonar techs got underway with you on February 9th.

WIT: Oh, we left - - - -

LT HEDRICK: How many sonar, that includes, well including the chief, I guess?

WIT: The chief stayed in port, along with um, with a watch section, he stayed in port with a watch section and they were at the attack centers. That is an area we were go and assimilate everything. We assimilate like we are underway. We work; we dedicate that time specifically to how we would operate tactically.

LT HEDRICK: So how many sonar techs got underway?

WIT: I want to say eight, but I am not sure.

LT HEDRICK: Okay. Um, with the towed array housed, what is the normal number of watchstanders in sonar?

WIT: Including the supervisor, three.

LT HEDRICK: So it would be the supervisor and two operators?

WIT: Yes, sir.

LT HEDRICK: What is your senior in rate qualification?

WIT: Right now, I am in the process of requalifying sonar supervisor.

LT HEDRICK: So you were qualified sonar sup on another ship?

WIT: Yes, sir. Yes, sir. Same class of ship 688I, as a matter of fact it was the first 688I, the USS SAN JUAN.

LT HEDRICK: How many years ago was it? How long has it been since you stood a sonar supervisor watch?

WIT: The last time I stood a sonar supervisor watch was in 19, when did I leave, 96, 95 96.

LT HEDRICK: How long have you been assigned to GREENVILLE?

WIT: I have been on the USS GREENVILLE since August.

LT HEDRICK: August. So you made this EASTPAK deployment?

WIT: Yes I did.

LT HEDRICK: You have had some time to refresh your skills?

WIT: Yes. Yes, rather forcibly.

LT HEDRICK: Um, I know that we don't have the employment guidelines available right here, but do you happen to recall what the required number of qualified watchestanders is, the minimum, for a towed array deployed, submerged?

WIT: Yes. You are supposed to have, well for our specific configuration you are to have four operators and the supervisor.

LT HEDRICK: Four operators and a supervisor?

WIT: Yes.

LT HEDRICK: And that is a minimum number?

WIT: Yes. I was told that if towed array is deployed the AHS and DAHS, are manned.

LT HEDRICK: No, I am saying for the towed arrays housed?

WIT: Oh, housed.

LT HEDRICK: Yes, what is the condition that the GREENVILLE was in, the minimum number of qualified watches in sonar would be the supervisor - - - -

WIT: The supervisor and the two operators, so it would be three total. And I don't know if that is correct.

LT HEDRICK: Right. Um, but you do know that ah, SN Rhodes is not qualified to stand a sonar watch?

WIT: Yes, sir.

LT HEDRICK: He is in training?

WIT: Yes, sir.

LT HEDRICK: Um, as a broadband operator, is it in your area of responsibility to track the obtaining of sound speed profile and rather or not a current one in available?

WIT: As a broadband operator? No.

LT HEDRICK: Okay. Ah, name a couple of watch stations that ah, would be involved in that or would share or would have something to do with that responsibility?

WIT: Ah, the fire control, the controlman of the watch they normally keep sound velocity watch. The chief of the watch is always ah, calling ah, calls maneuvering to have them to get sea water temperature so that is three guys there. Um, and the workload share operator will actually get the sound velocity or the actual sound velocity on the display that is right within his reach in the sonar shack, so that is four guys.

LT HEDRICK: Okay. Um, then feel free to look at the logs during your watch period if you wish you had stated that you had tracked several contacts on your watch?

WIT: Yes, sir.

LT HEDRICK: You had to be able to get screw blade from those contacts, were any of those contacts to the north? During your watch, say ah, somewhere between 325 and 030?

(The witness reviewed the logs.)

WIT: We had, ah yes, sir we did. We had a few actually.

LT HEDRICK: You had a few contacts to the north?

WIT: Most of them.

LT HEDRICK: And using the logs as a reminder, do you think you had a good track on those contacts?

WIT: Oh, absolutely.

LT HEDRICK: Okay.

WIT: I mean we had positive signal to noise ratio on almost all of them. The only time when SNR dropped off is when they were going towards the baffles.

CDR CACCIVIO: I really have to interrupt here. This is CDR CACCIVIO. We need to take a second here really quick. Can we just stop please?

LT HEDRICK: Okay we are back here. We took a sixty-second break here for CDR CACCIVIO to ask a question of me, LT HEDRICK, continuing with my questioning of Petty Officer Reyes. Um, of the roughly 8 personnel you took to sea on February 9th were all those personnel assigned to stand watch in sonar or where they supposed to stand watch somewhere else?

WIT: Yes, sir. Ah, Petty Officer Anderson was on the fathometer. Um, that is three six and ah, I guess the other guy was rotating with him on the fathometer as well.

LT HEDRICK: So and I realize that you didn't write the watchbill, but to the best of your knowledge two sonarmen where assigned to the fathometer watch that day?

WIT: Yes, sir.

LT HEDRICK: Okay. Do you happen to recall in general, what the watchbill was like for the day, what the plan was, as far as number of sections, number of expected watch relief's, I know you have said about that there was a maneuvering watch there was a morning watch, that you stood. What was the rough plan for the rest of the day?

WIT: The rough plan was ah, we were going to split the day right down the middle and ah maneuvering watch is maneuvering watch, everybody is on watch during that time anyway. So, if you just happen to have the first watch right after that, hey so be it. You know, take the watch, eat lunch, and then you are off. And just go through and mangle with the guests, let them know who you are, don't be afraid um, it was like I said before, it was a pretty routine day. And um, and um, the plan was for the emergency blow and then we were going to transit right back home. We were on our last legs; we were on our way home.

LT HEDRICK: So, of the eight watchstanders, the eight sonarmen, um that you took with you underway, two were out in the fathometer, there was your watch section, another watch section of three personnel, that would make 8. To the best of your knowledge, the watch section that you were in are all of those, there is a sonar supervisor, correct?

WIT: Yes, sir.

LT HEDRICK: And he is qualified sonar supervisor?

WIT: Yes, sir.

LT HEDRICK: And you are qualified broadband operator, in basic sonar?

WIT: Yes, yes.

LT HEDRICK: The other operator in your section is he qualified sonar operator?

WIT: Yes.

LT HEDRICK: So, SN Rhodes was the only unqualified watchstander unqualified to stand watch in sonar?

WIT: Yes, sir.

LT HEDRICK: Okay. Um, you mentioned something about ah, classifying a contact and how you would have to assign part of your workload share stack to reclass function to obtain the screw blade and RPM information. Are there any other pieces of gear in sonar that would allow you to obtain class information?

WIT: Yes, sir.

LT HEDRICK: Not anything else that is associated with towed array which was housed because of surfacing evolution?

WIT: Yes sir. We have what you call the BQR 22, that is just a number designator for the spectrum analyzer that we have onboard and um, unfortunately that piece of equipment was tagged out because of, because - - - -

LT HEDRICK: Was it for routine maintenance or was it because of a material failure?

WIT: A little of both. It was a little of both, we had a screen fail in control and ah they didn't want it there anymore so we were in a process of trying to turn it back into supply. It was better to deal with it after the underway then - - - -

LT HEDRICK: Would it have been possible, in your opinion, would it have been possible to operate the spectrum analyzer with the controller unit in the fail mode it was but still be able to use the BQR 22 in sonar?

WIT: No sir, because it was tagged out completely. It was tagged out electrically.

LT HEDRICK: Was it tagged out because of supplying power to the system would have been unsafe, because of the condition unit in control or was it tagged out to make it safe for when you started moving it?

WIT: No sir. It was tagged out for both reasons, because the unit in control the screen was removed and there was no way of knowing if power to the unit in sonar was going to completely isolate electrical current to the open, open end cables that were in control, so has as many guests that we had onboard. Not to many bright guys, I mean guys would do whatever and just grab wires you know. I mean guys - - - -

LT HEDRICK: Any other pieces of gear available to you in sonar for you to obtain this class status?

WIT: Aside from classification function and BQR 22, that is also a spectrum analyzer that is it. I mean the arrays were in and we couldn't do it on the EWS's, I don't even know what that is does are.

LT HEDRICK: Do you happen to recall what the range of the day was for a merchant?

WIT: No sir, I don't. No, I do not.

LT HEDRICK: Is that something that is normally calculated or determined or?

WIT: Yes sir, it is something that is calculated or determined every time for the search plane.

LT HEDRICK: Who's area of responsibility is it to ah, to be aware of that and pay attention to that, who?

WIT: Sonar supervisor sir. Sonar supervisor's and they pass that down to the operators. Because they hey, you pick up a contact on the sphere, on the towed array, typically the range is going to be whatever, they will tell you, but I cannot honestly remember what the range is, for that day.

LT HEDRICK: I am going to try to transition a little away now from some of this background information that you gave us and talk a little bit more about the ah, the time you were in sonar associated with periscope depth and the collision.

LT JOHNSON: Excuse me Lieutenant. This is LT Johnson. Can we take about a 5-minute comfort break because this is going to go on for a bit? I need a break. Can we do that?

LT HEDRICK: Okay. Continuing on with the interview at 1000, local LT Hedrick, questions Petty Officer Reyes. Going back to the time where ah, where you came back into sonar, at lot of this is just to be to clarify what you had said during your own time line. Um, when you walked back into sonar to get your jacket, can you tell me who you saw in sonar, how many folks?

WIT: There were ah, there were a few ah, it was it was about five. Five of them hovering over SN Rhodes and Bowie, and Petty Officer McGiboney at the forward side of sonar.

LT HEDRICK: So that is the three watchstanders, right? Rhodes, Bowie, and McGiboney?

WIT: Yes, sir.

LT HEDRICK: And who else, to the best of your recollection?

WIT: Ah, the civilian guests.

LT HEDRICK: How many civilian guests were in sonar?

WIT: There were about five or so. I don't know if you gentleman have, I am sure you have sir, the sonar shack isn't a very big room. You gentleman went down there, you saw that it is not a very big room. And if you got these two guys sitting in those chairs and you have five people around them that is pretty cramped and everybody is like "let me in here", and we are like slow down. I ah, I made my way through there and I was like look "ladies and gentleman this is sonar this is what is about, this way they could operate." And ah, if there was something that they could listen to and we had the extra set of headphones we let them listen to that. And but ah, I didn't want, I didn't want them being distracted and McGiboney getting yelled at by the OOD by not maintaining positive control.

LT HEDRICK: Okay. I want to make sure that I am not confused. At this point when you walked into sonar, you were using an extra set of headphones and passing that around to the civilian guests?

WIT: Yes, sir. We have a supervisor head set that hangs over the side and then there are two jacks where you can listen to audio and there were extra headsets specifically set out for that.

LT HEDRICK: At what point did the guests leave sonar?

WIT: They left when we were making preparations for periscope depth because all the action was going to be out of sonar, it would be in control. And ah, - - - -

LT HEDRICK: And what prompted them to leave?

WIT: 1MC announcements. The captain was making 1MC announcements, the 1MC is the the PA system if you will and he was letting them know what exactly was going to be happening every step of the way. And ah, at that time, he said "We are

making preparations to go up, take a look around, and then we are going to go deep and blow". They wanted to be there for all of that.

LT HEDRICK: So, on the 1MC the captain said something to the effect of we are making preparations to go to periscope depth?

WIT: Yes, sir.

LT HEDRICK: Did he use the 1MC to request that the visitors exit sonar or come to control?

WIT: He didn't request them to ah, exit or anything. He just made the statement and ah, that's were it is going to be if you really want to see something, experience something. That's were it is at. And they kind of went out there "Oh, cool, cool". You know, I want to see what is happening.

LT HEDRICK: Okay. So you translated the CO's 1MC announcement - - - -

WIT: Pretty much.

LT HEDRICK: And all five guests pretty much left at that same point and went out?

WIT: Oh yeah. Oh yes. Sonar shack was empty of guests and the only guys that were in there at that time was the supervisor and the two operators and ah, the way up that is when I started ribbing SN Rhodes and ah, we made the ascent to periscope depth okay.

LT HEDRICK: Okay. Um, now you are previously qualified as a sonar supervisor, so you have a rough idea of what normally would happen when the ship is doing an excursion to periscope depth. I realize that you weren't on watch, you had been out of sonar a few minutes, but when you came into sonar what do you think was going on, what was the ship doing? Did they start making preps yet?

WIT: They had not made preps yet, sir. They ah, as a matter of fact, we had just finished doing what is called angles and dangles.

LT HEDRICK: Just finished angles and dangles when you walked in?

WIT: Yes, sir. And ah, civilians were all there. The announcement was made that we were going up. I ushered them out. We cleared baffles to the right and - -

LT HEDRICK: Were you in sonar during the baffle clearing?

WIT: Yes, sir I was. We cleared baffles to the right. We cleared over 120 degrees and I don't remember what course we went up on, it was to the south I think.

LT HEDRICK: Where the civilians in sonar during the baffle clearing?

WIT: No sir, they were not. I was standing at the - - - -

LT HEDRICK: How do you know that this was a baffle clear maneuver.

WIT: Because they said, "clearing baffles to the right".

LT HEDRICK: Who is they?

WIT: The OOD.

LT HEDRICK: The OOD said that?

WIT: Yes, sir.

LT HEDRICK: And you heard him because of, how did you hear the officer of the deck?

WIT: I heard him over the open mike.

LT HEDRICK: You heard the officer of the deck over the open mike. Um, and once again to make sure that this is clear for the record, um you heard the officer of the deck over the open mike say "we are clearing baffles to the right", and at this point, personnel in sonar where three watchstanders: McGibboney, Bowie, Rhodes and yourself. There were no other military personnel in sonar or VIP's.

WIT: The XO was standing right next to me, with one foot in sonar and one foot in control.

LT HEDRICK: The XO in sonar. Okay. One foot in sonar and one foot in control?

WIT: He was right at the door. He was right at the door. He was standing right next to me.

LT HEDRICK: Do you have any idea what he was doing there?

WIT: Pretty much what the rest of the crew was doing, making sure the civilians were not getting in trouble and just putting on the happy face, like I am the XO, but we didn't, unfortunately, when we stationed the maneuvering watch ah, we have a display the ASVDU, out in control. It fried on us. One of the deflection amps fried, if you guys are familiar with how a television works there is a bunch of ray guns in there and everything got compressed onto one side. So there was no date coming from that. So the officer of the deck couldn't see what was going on in sonar, because at a touch of a button he can bring up anyone of our displays and unfortunately that fried on us. And during the maneuvering watch he called for someone out in sonar to come up to control and he asked what is wrong with this. Just by looking at it, we knew, we knew right away, just do to experience and "sir, one of the deflection amps went, if you want we can rack it out right now, and pull the part from supply and fix it". But ah, we were rocking and there were civilians onboard and it is energized gear. So ah, he goes "no, don't worry about it, we will fix it when we get in port". I said "sir that is a good idea".

MR. ROTH-ROFFY: I am sorry. Ballpark time that failed?

WIT: It was like station the maneuvering watch, we were shutting the weapons ammunition hatch, the civilians were already onboard and ah I really, I really can't give a time, we were on the maneuvering watch. It was in the beginning of it sir.

LT HEDRICK: Was the ship still moored?

WIT: I would say no. I would have to say no.

LT HEDRICK: Okay. So it was - -

WIT: It was, It was very close.

LT HEDRICK: It wasn't before you got underway or it was right after you cast off the lines from the pier?

WIT: Yes, sir. And once the AVSDU was gone the OOD couldn't see, so the XO was there standing next to me and I had a

question about one contact, Sierra 10. Because while we were doing angles and dangles, we had what you call an closing interference pattern.

LT HEDRICK: This is a watch classification?

WIT: Yes, sir.

LT HEDRICK: It appeared that he was closing?

WIT: Yes, sir. I was, I was concerned about it. I mentioned it to the sup and he goes "ask the fire control watch". "Okay". So I was like hey is this guy closing or what. He was like "No, this guy is on this course, doing this and doing this, doing this, doing this, I know that he is not closing". I am like "Okay", and then I ask the XO, "sir, I think this guy is closing". He goes, he smacks me upside the head, he goes "How fast are we going". And I was like "Oh, okay". We were actually driving the ah, the range, the closure on this guy, so I was like "I am sorry, my bad".

LT HEDRICK: Saying he smacked you upside the head is a figurative term?

WIT: Yes, sir. Oh no, he never touched me. When we changed course to the right, the contact was actually Sierra 10, not the one I thought we were closing and ah, we put him in the baffles. And um, all we had was Sierra 12 and 13 at that point, they were on the left, drawing left. At ah minimum bearing rate, I mean they from what we thought, we thought they were outside 10,000 yards. We came up to periscope depth and we didn't see them.

LT HEDRICK: Okay. Um, did was there, officer of the deck stated over the open mike that they were clearing baffles. Was there any acknowledgment from sonar?

WIT: Yes. Every station that is involved in going to periscope evolution has to acknowledge the officer of the deck. First it will be sonar, then ESM radio, and then COMM radio/ESMI, we all acknowledge that we are going to periscope depth and the open mike has to be energizing, because if he is on the scope he can't grab the 27MC, or the circuit to contact us threw. So it is easier that way.

LT HEDRICK: I understand that, that's what ah, what the normal routine is can you tell me, who you remember making those reports and how they made them? Or if you specifically remember

somebody not making one of those reports? Can you tell me about any of the communications that you remember for February 9th on the periscope depth.

WIT: I remember hearing all stations, CONN, making preparations to go to periscope depth and I want to say it was the captain that said it, but I can't say it at 100 percent.

LT HEDRICK: Okay.

WIT: There were so many voices in control at that time and ah, the captain was, he was, he was talking to the guests, this is what we do, this is how we do it, and at this command this is how the crew is going to react, and this is how they respond. And he was letting them know that we were acknowledging the fact that we knew we were going to periscope depth.

LT HEDRICK: So sonar did acknowledge?

WIT: Yes, sir.

LT HEDRICK: And who acknowledged?

WIT: The supervisor.

LT HEDRICK: And how did he relay that to control?

WIT: He grabbed the MC circuit and he said "conn, sonar, aye", "conn, sonar, yes I acknowledge".

LT HEDRICK: The MC circuit that would be the 27MC. Which would be the normal communication between sonar and the officer of the deck?

WIT: Yes, sir.

LT HEDRICK: Do you recall if any other stations made acknowledgments that they were making preparations?

WIT: Yes, sir they did. Radio and the ESM also on the 27MC.

LT HEDRICK: So you specifically recall sonar, radio and the ESM all making acknowledgements for making preparations for periscope depth?

WIT: Yes, sir.

LT HEDRICK: Okay. Um, were there any communications between the officer of the deck and sonar during the baffle clear or after the baffle clear?

WIT: Yes, sir. He asked specifically what contacts we held and ah - - - -

LT HEDRICK: Now when you say he, can you say with any certainty on who "he" was?

WIT: No I cannot. I am sorry.

LT HEDRICK: So it was somebody from control over the open mike?

WIT: Yes, sir. At the time, I was, I was instructing SN Rhodes on how to do a periscope depth ascent and ah, but I remember the, I remember the communication, basically what do you got. And ah, I remember the supervisor saying we currently hold these contacts Sierra 10, 12, and 13, and ah, and he goes "sonar, conn, clearing baffles to the right", I remember hearing sonar, conn clearing baffles to the right. I think that was the captain too and ah, we shot over. And I tried to get SN Rhodes to put his cursor or tell me what the initial bearing was or what are course was when we initially started clearing baffles. Now when we keep the OOD, officer of the deck honest, because if you don't clear 120 degrees you definitely don't know what is behind you. So, we shot, we shot way over, what I think was 120 degrees just based on what I saw on the display. And ah, we came up to the south, and ah, I heard over the open mike, no close contacts. At that point, I backed off. I was like okay, cool and then we went to PD.

LT HEDRICK: Okay. When you went to PD, I am still trying to focus on the depth change to 608, on the preparation phase.

WIT: We didn't go to 60 we went to 550 feet.

LT HEDRICK: Okay - - - -

WIT: I remember hearing that over the open mike.

LT HEDRICK: We will get to that in a second. Um, so CO announced the baffle clear to the right and at some point someone from control from the open mike requested some type of summation of sonar contacts and the supervisor responded that he held Sierra's 10, 12, and 13. Do you know if the supervisor

said anything other than that I have three contacts or do you recall that he gave some type of summary of what contacts?

WIT: He gave, yes sir. He gave contacts that he had in ATF, what their bearing was, it is a standard, it is a standard report, it's is a report that you have to make, we have Sierra 10 bearing 010, whatever his bearing was and he is on the left drawing left. We have Sierra 12, actually Sierra one two, bearing whatever he was bearing, and he is on the left drawing left, you know this fast or whatever, and an estimation of range for each contact. And ah, based upon what we had, the bearing rate, they were all I am thinking outside ten thousand yards.

LT HEDRICK: And to the best of you recollection, those, that normal report was made by the sonar supervisor?

WIT: Yes, sir. Supervisor was the one talking to the officer of the deck at that time. I can remember that.

LT HEDRICK: Okay. Um, do you recall if the XO was involved with any sonar evaluations or analysis during this time of preparing to go to PD, baffle clear, and contact assessment?

MR. ROTH-ROFFY: I am sorry. Could we please break just for a second? He needs to replace his tape.

(The recorder replaced the tape.)

LT HEDRICK: LT Hedrick continuing the questioning of Petty Officer Reyes. Oh, whether or not, you recollect whether or not the XO had any involvement in sonar during the baffle clear, or any communication between sonar and control, if he was involved in any of that?

WIT: I ah, like I said, I ah, was helping out SN Rhodes, the XO was standing by, behind me and he was looking at sonar and he was looking at fire control. He was like "we are the ones kind of driving the closure on this guy no that". Not the other way around, so. He, he had a, I guess he had a handle on what was going on, so. Yes, I would probably say yeah.

LT HEDRICK: Well we will ask him if he had a handle, but do you feel that he was focusing some of his effort on sonar?

WIT: Yes, sir.

LT HEDRICK: Well, your previous statement was, was that he was standing in the door way - - - -

WIT: Between sonar and firecontrol, yes, sir.

LT HEDRICK: Interfacing with the VIP's, you know with a happy face, he was doing a bunch of things, some of his involvement was with sonar?

WIT: Yes.

LT HEDRICK: Alright, so um, we talk about the baffle clear and those comms, so ah, after the sonar supervisor reported his contact assessment, what happened next?

WIT: Sonar clearing baffles to the right. We came over to the right, we put Sierra 10 in the baffles and ah, once ah, once we, once, we, I don't know once we steadied up on course, we came up. And ah, we went up to PD.

LT HEDRICK: Did you, when the ship-started coming up, did you feel that a sufficient baffle clear had been conducted?

WIT: Yes and at that time we went to two-time integration and um - - - -

LT HEDRICK: How did you know, shifting to two time integration on the technical side is ah, um, standard procedure it is on when the ship comes up to periscope depth and what it does, it gives the operators a much better visual clue of any transits in the, of any transit contact or just occasional noise, it enhances their indication of any close aboard contacts. So that switch was done. Was that done because somebody felt the ship coming up or was there an announcement or something?

WIT: Absolutely, sir, on the announcement all stations conn, preceding to periscope depth, at that point every station that is involved in the periscope depth evolution, conn, sonar, radio, and ESMI, all acknowledge.

LT HEDRICK: To the best of your knowledge, were all those acknowledgements made?

WIT: Yes sir, they had to because I specifically remember the ESM push button, the early warning receiver being pushed, because one of the guests - - - -

LT HEDRICK: So, you remember hearing a, you remember hearing the test tones over the open mike?

WIT: Yes, sir. It is annoying. I know it is there.

LT HEDRICK: Okay. And the only reason that I am asking this is because I am trying to, I am trying to make sure that we determine to the best of your recollection what actually happened, not what should have happened, what most likely happened, or happened every time on GREENVILLE. So um, do you specifically remember that all the reports about going to PD were acknowledged?

WIT: Yes.

LT HEDRICK: That all three stations, radio, ESM, and sonar all gave acknowledgments about going to periscope depth?

WIT: Yes.

LT HEDRICK: Do you know who, or could you tell who made the statement, "proceeding to periscope depth". Previously you had said the CO saying something about the baffles or do you know if it was the officer of the deck?

WIT: I think it was the officer of the deck.

LT HEDRICK: Do you think?

WIT: I believe it was the officer of the deck.

LT HEDRICK: And who made the acknowledgment in sonar for going up to periscope depth?

WIT: The supervisor, Petty Officer McGiboney.

LT HEDRICK: The same person who acknowledged the baffle clearing and gave the contact assessment?

WIT: Yes, sir. At that time he had the mike in his hand and he was doing all the communication between sonar and fire control.

LT HEDRICK: At this point um, had there been any personnel additions, subtractions, or change outs in sonar from what was previously stated, still the three personnel on the watchbill, yourself and the XO in the doorway?

WIT: Yes, sir.

LT HEDRICK: Based upon my experience, I know that this is normally a time in sonar where it is relatively quiet?

WIT: Yes.

LT HEDRICK: You believe. What was your assessment of the noise in sonar shack relative to the standard operating procedures at other times that you go to periscope depth?

WIT: Well, it was that we didn't have the civilians in there. There was nothing, nothing to ah, to truly distract the guys and I think, I think it was an exceptional periscope depth evolution because, I was able to truly show SN Rhodes, hey this is how you want to look off the bow.

LT HEDRICK: Okay.

WIT: There was no one in there other than the sup, the operators, myself, and the XO.

LT HEDRICK: Um, so the ship was coming up to periscope depth and what was happening in sonar as the ship was making the ascent?

WIT: Nothing that we were, we were, like I said, conducting our search to off the bow. Making sure that there were no close contacts off the bow.

LT HEDRICK: Do you know if both operators were focusing their search off the bow or can you only testify to what SN Rhodes was doing?

WIT: I can only speak for SN Rhodes, because I was there, I was watching his display.

LT HEDRICK: Ah, as a formally qualified sonar supervisor and requalifing on this ship um, did you ever during this evolution think that sonar supervisor, Petty Officer McGibboney, or Petty Officer Bowie had any significant deficiencies on their watch standing practices?

WIT: No, sir.

LT HEDRICK: As far as the attentiveness or during what they were supposed to do?

WIT: No.

LT HEDRICK: As far as you can recollect, you don't remember any shortcomings?

WIT: No, sir.

LT HEDRICK: Okay. So the ship is ascending, you and SN Rhodes are focusing your attentions on the forward part of the ship?

WIT: Yes.

LT HEDRICK: Do you recall what the ordered depth was for periscope depth?

WIT: five five feet.

LT HEDRICK: five five feet. Was that the ordered depth or was that the depth that the dive called out?

WIT: No, I specifically heard make your depth five five feet.

LT HEDRICK: You specifically heard make your depth five five feet at some point and how did you hear that?

WIT: I heard it over the open mike.

LT HEDRICK: Do you know if that was while the ship was still submerged coming up or could that have been quite possibly sometime later, when the ship was already shallow or at PD?

WIT: It was after we were already at periscope depth. I guess they were taking, they were already getting wave slap on the periscope and then I heard make your depth five five feet.

LT HEDRICK: The wave slap. Is that a supposition on your part because you heard them make your depth five five feet or do you hearing any communications threw the open mike about wave slap?

WIT: Yes. Yes, we are getting ah, yes there was swells and the boat was rocking and I was like oh well.

LT HEDRICK: So you did hear communications?

WIT: Yes, sir.

LT HEDRICK: You heard, taking hits, number two scope, or something like that?

WIT: Yes, sir.

LT HEDRICK: Do you know who ordered the depth of five five feet?

WIT: No.

LT HEDRICK: I realize that you are not in control at this time and you're also not the sup.

WIT: No. I really don't. But I did hear five five.

LT HEDRICK: Okay. Um, how about any reports made when reaching periscope depth, do you happen to recall if any were made?

WIT: Yes, sir. The report came over, no close contacts. And then that was good enough for me, I was like "yes".

LT HEDRICK: The report came over no close contacts?

WIT: Yes.

LT HEDRICK: So, who is making that report?

WIT: The officer of the deck.

LT HEDRICK: And came over means the open mike?

WIT: Yes.

LT HEDRICK: So you heard the officer of the deck report no close contacts?

WIT: Yes, sir.

LT HEDRICK: Do you recall any reports being made shortly after that?

WIT: Yes, sir. I don't know, I don't know if it is just a GRENNVILLE thing or if it is fleet wide, but normally at the report no close contacts I was used to sonar reporting first. No close contacts sonar, I. Then, I mean ESM radio would make whatever reports. Here it is ESM, sonar, then radio. So that

is the order that it went down: ESM no close contacts, then sonar, and then radio reports no close contacts.

LT HEDRICK: And you do remember all those reports being made?

WIT: Yes.

LT HEDRICK: Do you know if any of those reports were acknowledged, by the officer of the deck?

WIT: No. After no close contacts, and the acknowledgments I turned off. I was like, okay we are there.

LT HEDRICK: I understand. I understand. Um, and I appreciate your patience. Thinking back on those questions I asked specifically the ones about the comms and the baffle clear and ascending to periscope depth. Do you feel relatively confident that, you know when you said that I heard that, that it is yes you heard that and it's not I always hear that, or so that it probably happened?

WIT: No, sir. I heard that.

LT HEDRICK: Okay. Thank you very much. I appreciate your patience.

LT JOHNSON: How are you doing? I am LT Johnson with the Coast Guard. Oh, my mind just went.

WIT: You said that you were LT Johnson, sir.

LT JOHNSON: Yep, that is the one thing I do know is who I am. Okay, I am going to ask you about playing the tapes and the biologics?

WIT: Sure.

LT JOHNSON: What depth was the vessel when you were playing these tapes?

WIT: We were, we were like on the surface and the folks wanted to hear some, wanted to hear sonar and unfortunately on the surface like I stated before, they don't get much. So we played tapes through for them while we were on the surface and then when we dove, we still didn't have any biologics either, so we ran the biologics tapes pretty much steady.

LT JOHNSON: Throughout, while you were on the surface or submerged?

WIT: Both.

LT JOHNSON: Both. When you were playing these tapes in sonar for the guests, would that impede the sonar operator's ability to do their job?

WIT: Not at all. Not at all. The tape decks are completely independent of the safety of the ship's stack. It's just ah, its just, you have a speaker and you can more than one input into this one speaker and there is a selective switch and all they did was assign the selective switch to the tape deck, instead of what the operator was listening to. To be audible heard in the sonar shack.

LT JOHNSON: So these are played over the speaker in the sonar room?

WIT: Yes, sir.

LT JOHNSON: Um, we the visitors talking to the operators at this time?

WIT: When I went in, yes.

LT JOHNSON: Is that distracting to the operators?

WIT: It could be, if they are turning around and not looking at their displays.

LT JOHNSON: Were they turning around and not looking at their displays?

WIT: Initially SN Rhodes started to turn around and I didn't physically smack him upside the head, but I interjected and I spoke to the guests. See as a supervisor, or former supervisor requalifying now, the operator should do nothing but operate. And one of my pet peeves is if you are on the stack don't turn around. You can talk to me you don't have to turn around. So when I saw him kind of turn, I said "no". Like I said, I interjected.

LT JOHNSON: What about the other operator?

WIT: Petty Officer Bowie was a, he was touching his operator face with the unit, the operator face with the unit, he was touching the touch panel and the sup was next to him, but it had the potential for - - - -

LT JOHNSON: When these visitors where talking to the sonar operators, where the operators responding to them or just ignoring them, or what were the sonar operators doing?

WIT: The supervisor and the operators were trying to talk to them at the same time and explain to them what he wanted from them and what he wanted them to do. And it was not clear communication, so.

LT JOHNSON: Were the operators actively responding to the guests?

WIT: SN Rhodes was.

LT JOHNSON: SN Rhodes was but Petty Officer Bowie was not responding?

WIT: Petty Officer Bowie was responding. Once or twice.

LT JOHNSON: So he was listening to what they were asking?

WIT: Yes.

LT JOHNSON: I just want to make sure that, I am trying to figure out what the operator was doing, if he was listening to the questions being asked him and could he have been distracted by that?

WIT: Yes.

LT JOHNSON: You said that the civilians were escorted out of sonar when preparations were being made to go to periscope depth?

WIT: Yes.

LT JOHNSON: What depth was that when they were escorted out?

WIT: We were at, we were at, Oh wow! I honestly don't know. But normally, when we have, you see I can't really say that, because I don't know. Normally when we make preparations to go to periscope depth, we come up to 150 feet.

LT JOHNSON: Those preps to go to periscope are conducted at 150 feet?

WIT: They can be conducted deep as well. I mean, it just varies.

LT JOHNSON: I understand, I am just asking normal procedures. Does the normal direction make preps to come to periscope depth at 150 feet?

WIT: Yes.

LT JOHNSON: And at what depth do you conduct your baffle clear prior to coming to periscope depth?

WIT: One five zero feet.

LT JOHNSON: So were the guests in sonar during the baffle clear?

WIT: No.

LT JOHNSON: You know that for a fact?

WIT: I know that for a fact. Because I was there.

LT JOHNSON: Now in sonar, or wherever it was that you were standing do you hear the same thing that the sonar supervisor hears in the way of the open mike from the control room?

WIT: Yes.

LT JOHNSON: Is there any way that you can hear some things that he would be prohibited from hearing?

WIT: No.

LT JOHNSON: Or not acknowledge?

WIT: Yes.

LT JOHNSON: There is a chance then that the sonar sup did not hear the same things that you heard?

WIT: Yes. Absolutely. If he has both headsets or earpieces on and he is listening to something on the primary stack, he may miss something.

LY JOHNSON: Is there a chance that someone else could have responded to the conn from sonar besides the sonar supervisor?
WIT: No. No, he had the mike.

LT JOHNSON: And who was the supervisor during this time frame?

WIT: Petty Officer McGiboney.

LT JOHNSON: And you know the sound of his voice?

WIT: Absolutely.

LT JOHNSON: Were you in sonar during the baffle clear?

WIT: Yes.

LT JOHNSON: Was the XO in sonar during the baffle clear?

WIT: Yes.

LT JOHNSON: Did the XO specifically request any information regarding any of the contacts that you held to the north, Sierra 12 and 13, I think they are? Did he specifically request any information about those contacts?

WIT: If he did, I don't think that he asked me. I know that he didn't ask me. If he did, he did not ask me.

LT JOHNSON: But you did not hear him, you personally did not hear him request for any update information?

WIT: No sir.

LT JOHNSON: Did you hear, and I know that you are in sonar and he is by the door. Did you hear the XO pass any information to the officer of the deck regarding the sonar picture?

WIT: I don't know. I that point I don't know, because if he stepped out of sonar.

LT JOHNSON: You did not hear?

WIT: No sir. I did not.

LT JOHNSON: Um, during the emergency deep, did the sonar supervisor step out of sonar during any time during that?

WIT: No.

LT JOHNSON: Because there is a little confusion here. I know that he was trying to get a relief for a head call?

WIT: Yes, but he did not step out.

LT JOHNSON: Okay. Your ESM watchstander. Do you know who was on watch in ESM?

WIT: No. I am going to say no, because I really don't know.

LT JOHNSON: You wouldn't know the sound of the voice the person on the radio?

WIT: If I heard the voice, yes I would know.

LT JOHNSON: But you specifically heard ESM making reports and identifying himself as ESM?

WIT: Yes.

LT JOHNSON: Did the water conditions change during the day? Because you say in your logs that one part of the watch, I think when you were actually on watch, the first part they were getting screw blade information and it is properly logged. However when you are off watch, they are not providing any screw blade information? Did water conditions change to prevent them from getting that, to your knowledge?

WIT: No. Not to my knowledge.

LT JOHNSON: Did your um, your area of operation were you in the same um general, I am using general here, were you operating in the same general area the second half of the day as you were the first half of the day?

WIT: No, sir.

LT JOHNSON: You were not. So you changed OP areas?

WIT: Yes. We were in a transit lane. We transited out of Pearl Harbor.

LT JOHNSON: During your watch?

WIT: Yes. We were in transit and we were on our way to where the dive point was.

LT JOHNSON: Where you on watch during the dive?

WIT: I don't remember. I really don't remember. I would; yes. Yes, I was on watch during the dive.

LT JOHNSON: Was the vessel submerged when they obtained that screw blade information during the first half of the watch? Do you know, where you submerged at that point?

WIT: I don't know.

LT JOHNSON: I guess the point that I am trying to get at is did anything change between the time that we have data till the time we don't have data, other than the operators themselves? Was there any kind of equipment change? Was there any kind of a condition change?

WIT: No.

LT JOHNSON: Nothing at all. Do you have any um, and this is just your probably your opinion, because you are experienced and because you have done this a lot, why don't we have any information on the second half of the watch on contacts vice the first half?

WIT: It depends on, it depends on ah, on the operator; on how aggressive he is um, I mean, it could be a number of things. I really don't know. I really don't know.

LT JOHNSON: So we don't know why we don't have some of these?

WIT: No. We have had training on this before, so.

LT JOHNSON: Sure. Um, I am still um, and maybe this is just a code word or something, about the comment IMA JIMA. For some reason, does that mean danger or catastrophe, or something?

WIT: No. Not at all.

LT JOHNSON: Is the captain just trying to read the name off the bow of the boat?

WIT: That is, that is what he said. He read it.

LT JOHNSON: Okay. But it wasn't an exclamation?

WIT: No. No, he read that. I made the exclamation.

LT JOHNSON: When you have a low bearing rate on a contact, and I remember from what you said earlier that you had a low bearing rate on Sierra's 12 and 13. What can that tell you? What information can that indicate?

WIT: It indicates movement of a contact. Based on range and techniques that we use. We can tell, we can tell how close they are to own ship and based on the low bearing rate that they had, our indications read that they were further out.

LT JOHNSON: Was that an assumption that you would always that a low bearing rate would indicate an extreme range on the ship?

WIT: No, sir.

LT JOHNSON: What else could it indicate?

WIT: It could indicate that you have a contact that is pointing directly at you.

LT JOHNSON: A low angle on the bow closing in on you, right?

WIT: Yes, sir.

LT JOHNSON: It is one of two things. Either he is way out there or he is not so far out there and he is coming right at us?

WIT: Exactly. That would be very bad.

LT JOHNSON: You mentioned earlier that when you where coming up that if there is a ship, even if it is on the surface idle you can always hear it?

WIT: Yes.

LT JOHNSON: Slapping the water. I think your think was people walking on deck, chains being moved, machinery being operated?

WIT: Yes.

LT JOHNSON: Are you normally listening for these types of noises during your emergency ascent?

WIT: Yes, among others, yes.

LT JOHNSON: Okay.

WIT: Some of the other things that you are looking for is any, any trace starting to come in.

LT JOHNSON: Did you hear any of these noises during the ascent?

WIT: No, sir. Not at all.

LT JOHNSON: What, what was the flow over the hydrophone the flow, the flow noise like?

WIT: We weren't going very fast at all.

LT JOHNSON: You weren't?

WIT: No, sir.

LT JOHNSON: Okay.

WIT: Not for periscope depth, no sir.

LT JOHNSON: Sure. Okay. And you specifically heard the officer of the deck order the vessel to come to five five feet?

WIT: I heard five five feet.

LT JOHNSON: You heard that?

WIT: Yes, sir.

LT JOHNSON: And you specifically heard the officer of the deck say about taking wave hits over the periscope?

WIT: I heard, yes.

LT JOHNSON: Do you recognize the officer of the deck's voice?

WIT: I can't say it was the officer of the deck. That I can't say. I didn't even know who the officer of the deck was.

LT JOHNSON: Right. You mentioned that um, that um, that this was an exceptional, and I am putting that in quotations, evolution going to PD?

WIT: Yes.

LT JOHNSON: What made this exceptional?

WIT: It was, it was a text book periscope depth ascent. I mean there was absolutely no chatter in sonar, there was; it reminded me of, it reminded me of the days of the cold war when I was always in sonar and there was always a tense; going to periscope depth is always a tense evolution. You are preparing for the unknown. You really don't know if something is going to go up through the layer.

LT JOHNSON: Does it require coordination between several watch stations to do it successfully, ie, does it require coordination between your ESM guy and your fire control guy and your sonar guy, and your helms guy?

WIT: Yes.

LT JOHNSON: Um, are you aware of any standing orders or regulations that require a briefing to be conducted prior to; to ensure that everybody for a lack of better terms, playing off the same sheet of music and aware of the picture?

WIT: Yes.

LT JOHNSON: Did this briefing prior to going to periscope depth occur to your knowledge?

WIT: I don't know.

LT JOHNSON: Were you involved in any of the briefings prior to going to periscope depth?

WIT: No sir, I was not.

LT JOHNSON: Did you coordinate any of your contact information with the ESM or fire control watchstander prior to going to periscope depth?

WIT: No sir. I did not.

LT JOHNSON: Did sonar pass any contact information to the officer of the deck prior to going to periscope depth, to let him know who is out there, how many you are tracking, and where they are at?

WIT: Yes.

LT JOHNSON: You did?

WIT: Yes.

LT JOHNSON: Did you pass that specifically, or did pass it?

WIT: I did not. The sonar supervisor did.

LT JOHNSON: And you heard him pass that?

WIT: Yes, sir.

LT JOHNSON: Okay. I have a question in here. I'm sure that you say that wave slap. That is a term for hitting the periscope? The waves hitting the periscope?

WIT: Well it could be, you hear, you hear the waves hitting either a hull and slapping the hull or you are getting waves that are ah, hitting the little window on the scope and you can't see.

LT JOHNSON: How long have you been a sonar watchstander?

WIT: Well, I have been in the Navy for 12 years now and I was on the ship for five and half years. I was qualified supervisor for two and half years.

LT JOHNSON: In your experience, you can hear a buoy in the water, just hanging?

WIT: Yes, sir.

LT JOHNSON: Not doing anything?

WIT: Yes.

LT JOHNSON: Um, - - - -

WIT: You hear the buoy chain.

LT JOHNSON: The buoy chain, yeah.

WIT: Yes.

LT JOHNSON: Can you hear the waves slap against the buoy as well?

WIT: You hear the chain, you hear the chain.

LT JOHNSON: So a vessel that um, if we were to assume that was just sitting there doing nothing.

WIT: Um-ah.

LT JOHNSON: Considering the sea state, and you said that the sea state that you were a rocking and rolling at periscope depth?

WIT: It would be difficult. It would be difficult to see. But it would have to be um, a vessel that was completely in distress.

LT JOHNSON: It would be difficult to see - - - -

WIT: See or hear.

LT JOHNSON: Hear?

WIT: See and hear. The way the system works is it, it takes a sound source and it displays it for you. And if the thing is not making any sound, it is not going to give you anything to see visually on the display.

LT JOHNSON: Yeah. So, a rough sea the hull of the ship hitting on a rough sea - - - -

WIT: That is a transit. Yes - - - -

LT JOHNSON: That would stand out?

WIT: Yes.

LT JOHNSON: Okay, so that would, that would be something that is very pronounced or not so pronounced?

WIT: Not so pronounced.

LT JOHNSON: Not so pronounced. How about a vessel that the engine is idling?

WIT: You would be able to hear that, yes.

LT JOHNSON: Your um, in your opinion, once again on your qualifications and experience, these contacts that you held to the north, 12 and 13, was there anything else that indicated to you that those contacts were way, they had a very large range? Other than the bearing drift? We briefly spoke on that, a low bearing drift?

WIT: Prior or after going to periscope depth?

LT JOHNSON: Both, doesn't matter?

WIT: Prior to going to periscope depth, based on the bearing that we had and the course maneuver that we had made and seeing no change in the bearing rate. We figured that the contact was distant. Upon ascending to periscope depth, them taking their look around and not seeing the contact visually, I thought, "oh wow, this guy must be really out there". Cause, they didn't have him visually. So that, that right there told me that these contacts were distant.

LT JOHNSON: I see. That's all I have and I apologize to the commander, that is inconsiderate. I said that I was going to let him follow and I forgot, Commander. That is all I have.

LCDR SANTOMAURO: This is LCDR Santomauro. Hi. Um, I think the key issue is, how did this guy get so close? How did he get to where he was? Right? Um, I heard, that we thought that the contacts were distant. We estimated that the contacts were distant and just now you said that "we figured just based on bearing rate and we figured". We figured means to me that you had some way of computing that other than just; so, what I would like for you to do is explain to us exactly how you would compute range? Okay, I want to focus in on that, if we could do that?

WIT: Okay.

LCDR SANTOMAURO: I mean, I know that there are no ranges in the logs, right?

WIT: Okay.

CDR CACCIVIO: This is CDR Caccivio. Can I ask a technical question? Before we get into this line of questioning, can I think CAPT Kyle has spent a fair amount of time educating the board exactly how range is determined. Are you trying to question - - - -

LCDR SANTOMARUO: One question is not how CAPT Kyle explained it, but how he does it.

CDR CACCIVIO: Okay.

WIT: Okay. Based on the bearing rate that we get. Ah, we do, we do ranging maneuvers. We try to drive the bearing rate on a contact. We either turn left or right in order to establish a bearing rate. Okay, so this guy is moving so many degrees in bearing per minute or so and ah, over the course of time we can tell his range. Ah, there there are varies - - - -

LCDR SANTOMARUO: How much, can you tell me how much time it would take when you do this maneuver before you can actually determine the contact's range? How much time?

WIT: It depends ranging, if you do a maneuver at all, sir. I mean, you could do one, one single leg and um - - - -

LCDR SANTOMARUO: In time, can you tell me once you make the course change and drive, can you tell me how long does it take to get a good estimate?

WIT: A few minutes.

LCDR SANTOMARUO: Just a few minutes?

WIT: Just a few minutes. Then depending on, like again, again depending on his bearing rate, it is hard to determine.

LCDR SANTOMARUO: Is there a mathematical way you can do that?

WIT: Yes.

LCDR SANTOMARUO: Is that how you did it in this case?

WIT: No. I did not figure any range.

LCDR SANTOMARUO: Is there, is there a procedure that you are to follow that is a mathematical way?

WIT: Yes, there are a few mathematical procedures, yes.

LCDR SANTOMAURO: By procedure, are you supposed to do that?

WIT: Yes. You should.

LCDR SANTOMAURO: You should or is it by procedure?

WIT: By procedure, yes.

LCDR SANTOMAURO: But it wasn't, but you did not do it in this case and can you tell me why?

CDR CACCIVIO: This is CDR Caccivio. Please answer the specific question. As the workload share operator?

WIT: Um-ah.

CDR CACCIVIO: Is it your responsibility to developing contact solutions including target range?

WIT: No, sir.

CDR CACCIVIO: Okay.

LCDR SANTOMAURO: Can you tell me who's responsibility is it in the sonar room if any, to develop a range solution?

WIT: If any the supervisor should have a ballpark range of a contact and send that information out to fire control and at that point they have the equipment to jiggle to work the fire control solution. See in sonar it is very difficult because there are so many things that go on at the same time. You are not just tracking a contact in just bearing, this guy is moving into the present elevation as well. I mean it is two-dimensional.

LCDR SANTOMAURO: Can you, can you please tell me um, when you log that range into that log, where does that come from?

WIT: Here. You get various sources. You get visual ranges, you get radar ranges, you get fire control and then you get sonar estimates.

LCDR SANTOMARUO: There are no ranges in that log, is that correct?

WIT: No, sir.

LCDR SANTOMAURO: But yet the sonar supervisor actually had a ballpark range of greater than 10,000 yards on these two contacts. But they weren't logged as such?

WIT: Yes.

LCDR SANTOMAURO: Okay.

CDR CACCIVIO: On the tape - - - -

LCDR SANTOMAURO: Commander, I still have more. I know that you had placed a biologics tape on for the purpose of demonstration for the um, to the guests. What was on the tape roll, prior to you putting on the biologics? Was there anything on there before you put the biologics tape on?

WIT: No sir.

LCDR SANTOMAURO: So nothing was running at all?

WIT: No sir.

LCDR SANTOMAURO: You weren't recording anything prior to that?

WIT: No, because when we put the tape in prior to leaving. Once we stationed the maneuvering watch the tape went in.

LCDR SANTOMAURO: Was it you that loaded the biologics tape in?

WIT: Yes, sir.

LCDR SANTOMAURO: When, right before you got underway?

WIT: Yes, sir.

LCDR SANTOMAURO: Do you normally run any kind of recording tape in sonar, at all?

WIT: Yes, sir.

LCDR SANTOMAURO: During an underway?

WIT: No. We never, we never play an audio cassette like that with biologics on it, we are always in record, we are always

recording data when we are underway. I mean it's, it's how we operate. That is are operating procedure.

LCDR SANTOMAURO: How many, your; in a watch section you are supposed to have; are you supposed to have, yes or no question here; are you supposed to have a qualified passive broad band watch, a work share class watch qualified, and a sonar supervisor, is that the minimum requirement?

WIT: Yes.

LCDR SANTOMAURO: And in this case did you have that assigned?

WIT: No.

LCDR SANTOMAURO: During the time when you were doing the baffle clear to make sure that there were no contacts in your baffles, and you were doing a search of the area was the 1MC in use?

WIT: Yes.

LCDR SANTOMAURO: Can you tell me what was going on the 1MC?

WIT: Ah, the captain was ah, was letting, letting everyone onboard and the guests as well, what the ship was doing at every step of the way. What we were preparing to do and what we were going to do.

LCDR SANTOMAURO: Okay. Um, I want you to explain to me the procedures that it would take and how long it would take for you to shift sonar modes in order to go active sonar?

WIT: Okay. Once, once the assets are loaded on the busy one system and what I mean is software, was the software is brought up ah, you bring up, you bring up the program, you assign it to a console.

LCDR SANTOMAURO: How long does that take to do that?

WIT: You can have everything up and running inside of three minutes. If everything is working correctly.

LCDR SANTOMAURO: And you assign it to a console?

WIT: Yes, sir.

LCDR SANTOMAURO: Which console would you assign it to?

WIT: You would assign it to the workload share console.

LCDR SANTOMAURO: So when that happens, what happens to the ability for the ship to utilize what he was doing?

WIT: We just lost an eye, if you will. We ah, we only have two consoles left of the legacy busy one system and in order to go active we have to use one of those two consoles. So that leaves just one operator dedicated to safety of the ship and the other operator going active and that's that's, I mean, I wouldn't personally sir, I wouldn't feel right doing that. Because now you are sonofying the ocean environment and you only have one guy listening to this environment. And ah, and if he has to go into ah, what we call active reject?

LCDR SANTOMAURO: Now my next question is if you have sonar contacts out there, in which this case you didn't, you were assuming that they were a great distance away. You couldn't be very sure because you didn't have the range logged in your log?

WIT: Yes, sir.

LCDR SANTOMAURO: So if you did have a contact out there that you thought was a safety concern or a threat to your ship would or could an active pulse into the water actually ah, be something that you would possibly use to ah, to determine whether a contact was there, close abort?

WIT: Yes active, active will give you a range, yes. But ah, in the environment that we were in probably not. We had high, we had high; in the environment that we were in there was a high shipping density, lots of little ships all over the place; just, just, just where we were sound conditions were not good for an active ping, higher reverberation levels it just no, it wouldn't have been able to give us a good return, no sir. It would be, I could not tell you 100 percent that this is a contact just based on how far the water was. Yes, there was 1,800 feet of water, relatively speaking that is still not very deep. As far as active is concerned.

LCDR SANTOMAURO: When you say high-density contacts are you, can you explain that a little bit more?

WIT: Biologics, trawlers, ah, I mean, you can get erroneous returns off of surface reflection, bottom reflection. I mean

all these things come into play when you are using active. And it is hard to say yes, this is a contact.

LCDR SANTOMAURO: Okay. If I say that I have a contact bearing 357 with a small bearing rate, do you automatically assume that contact is far away, because it has a small bearing rate?

WIT: No sir. You can't do that. Because if this contact is presented to you in a narrow aspect, he will also present a small amount of bearing rate.

LCDR SANTOMAURO: So do you have to add in the factor that you are going to change course and drive?

WIT: Yes, sir.

LCDR SANTOMAURO: Okay.

WIT: You have to try to drive that bearing rate to see exactly what this guy is doing.

LCDR SANTOMAURO: If you have a contact that is fairly close to you, okay. Um, and your, could you have a small bearing rate being in the ?

WIT: Unless he is pointing you directly, that is the only way I can think of. But we had no classic sonar acoustic identifiers as to that this contact was close. Ah, we had no near field effect and that's that's a phenomenon that happens with the spherical array. A contact gets to close to it and now you got a series of transducer hydrophones picking up this same contact and it's, it's masking out.

LCDR SANTOMAURO: How close would a contact have to be to get a near field effect?

WIT: Depending on, depending on the acoustic conditions, you can see near field effect two thousand yards.

LCDR SANTOMAURO: Okay. I have to clear something up. Earlier you stated that ah, you were getting a report of no close contacts from ESM, sonar, and radio in that order, is that correct?

WIT: Yes, sir. ESM, sonar, and then radio.

LCDR SANTOMAURO: Okay. But radio doesn't report contacts, is that correct?

WIT: Right.

LCDR SANTOMAURO: Okay. So you would be talking ESM?

WIT: Yes. ESM radio, yes sir. They um, whenever we go up they ah, line up the copy broadcasts or whatever. For a typical periscope depth evolution.

LCDR SANTOMAURO: But radio doesn't report any contacts?

WIT: No, sir.

LCDR SANTOMAURO: That is all I have.

CDR CACCIVIO: Okay. This is CDR Caccivio. Do you see near field effect?

WIT: No sir.

CDR CACCIVIO: Okay. Um, you indicated previously that the XO had one foot inside the sonar door and one foot in control?

WIT: Yes, sir.

CDR CACCIVIO: Was he observing the sonar displays in your workstation?

WIT: Yes.

CDR CACCIVIO: Did he, did you have an indication that he was in sonar to get a handle on the tactical, sonar situation? Let me rephrase that. Did he ask any questions about what contacts you were tracking?

WIT: Yes. He, I, yes, he did. He asked me specifically.

CDR CACCIVIO: What did he ask?

WIT: "Hey, what do you got"?

CDR CACCIVIO: Okay. So then back to my previous question. Was it reasonable for you to believe that he came to sonar to figure out what the sonar picture was?

WIT: Yes, sir.

CDR CACCIVIO: Okay. Um, you indicated previously that you that the periscope depth attempt was exceptional because it was similar to a cold war format, could you kind of explain what you mean by cold war format?

WIT: Ah, yes sir. Ah - - - -

CDR CACCIVIO: You don't have to be technical.

WIT: It was ah, it was always, it still is a serious evolution. But it was just very quiet in sonar, there was no hey pass me the, the pencil or the, you know everybody was specifically dedicated to looking at their stacks and focusing on the job ahead to get to periscope depth safely.

CDR CACCIVIO: Okay. You indicated that you, okay. Do you feel that you had an adequate picture of what the surface contact picture was prior to going to periscope depth?

WIT: Yes, sir. I did.

CDR CACCIVIO: Did you feel that you had an understanding of the surface picture prior to commencing the EM&T blow?

WIT: I can't answer that sir, because I was not in sonar when we started blowing.

CDR CACCIVIO: Okay. What time, relative to the events of periscope depth, emergency deep, and emergency blow, when did you leave sonar?

WIT: I left sonar when the supervisor asked me for a head break or to find him a relief for a head break? He ah, he asked me for that after we started descending from periscope depth. That is about when we stabilized at ordered depth.

CDR CACCIVIO: Okay. Um, I have no further questions.

MR. ROTH-ROFFY: Could we - - - -

LT (jg) KUSANO: Mine will take five minutes. This is LT Kusano. Um, who, who is the one person that makes the determination that you are going to drive for bearing rate?

I mean, who gives the order? Is it the OOD, sonar sup, someone in fire control, I mean who is it? Who is the person that is going to say, "okay we are going to go here".

WIT: Um, well when you ah, pick up a contact you do, you maneuver - - - -

LT(jg) KUSANO: Who, who - - - -

WIT: Officer of the deck.

LT(jg) KUSANO: Okay. You said that sonar sup kind of, kind of has an idea of what the range was?

WIT: Yep.

LT(jg) KUSANO: Kind of ballpark?

WIT: Yes.

LT(jg) KUSANO: You being a sonar sup before and you had a ballpark figure before and when, when the sub drove for, when the sub drove around to get a range. What percentage would you say your ballpark was accurate to actual range, after the driving?

WIT: Based on what I saw?

LT(jg) KUSANO: Your experience, yeah.

WIT: In my experience, it has always been, it has always been right around correct.

LT(jg) KUSANO: Okay, so you - - - -

WIT: It has always been right.

LT(jg) KUSANO: Okay. That is all I have.

MR. ROTH-ROFFY: I am sorry. I have more questions. This is Tom Roth-Roffy. What I would like to do is that we completed the first round of questioning. I would like to make another round to give everybody a second opportunity to ask questions. So, I will go ahead and start with my second round. Just a couple of clarification questions for Petty Officer Reyes.

CDR CACCIVIO: Petty Officer Reyes, do you need a break at all.

WIT: No, sir. I am good.

MR. ROTH-ROFFY: The sonar data, do you have the ability to record that for archive purposes?

WIT: It is funny you ask that, cause ah, when I left, when I left my first ship, we did not have that data. It was always a myth that yes, it was going to come out and low and behold we have this new sonar system, the ARCI and we do have that capability now and ah, I think that data was turned over to you folks. But I didn't know it was running. I don't know about the ARCI system. I am not a tech on that. This is the first time that I have seen that.

MR. ROTH-ROFFY: And that is called the A-R-C-I system?

WIT: Yes.

MR. ROTH-ROFFY: And is that piece of equipment located in the sonar room?

WIT: Yes. Those are the other two consoles right next to the legacy system, yes.

MR. ROTH-ROFFY: And they are associated with the towed array?

WIT: Yes.

MR. ROTH-ROFFY: Do you have any other equipment that could record the data that you were seeing the morning of the accident?

WIT: Not ah, Not ah, not numerically or nothing in a log format like that, no. I mean we could record acoustic data, yes. I mean with tape decks, yes.

MR. ROTH-ROFFY: Okay with the tape decks you would be able to record the acoustic data. Were you recording acoustic data on the morning?

WIT: No, we were not.

MR. ROTH-ROFFY: Is is your normal practice to record the acoustic data underway?

WIT: Yes, yes. Always.

MR. ROTH-ROFFY: And why were you not recording the acoustic data prior to the collision?

WIT: We were, we were, well I really can't answer that; other than the fact that we were not ah, we were running biologics tapes, I guess so they could hear some of the biologic activity in the environment sounds like.

LT HEDRICK: LT Hedrick here. I would like to make a clarification here. The sonar system sends data to fire control continuously when there is contact information, when the conversation is about tracker. That information is available and is currently going through declassification process. We have had those print outs available. Ah, another recording medium was referred to as a sonar working tape, which is an audiotape of all what is occurring in sonar. Audio to the operators talking to, not data from the sonar system. So you can compare that to what actually happened to the record. That tape is normally recorded over on a regular basis in sonar and changed out once a day once it gets old and gets stretched. The intent is that if something happens you would now take that tape out before you recorded over it and just use a new tape. Now, you can keep that one for that time when you had a wreck. The playing back of the biologics was using this tape deck and they never stopped doing that and never started a working tape back up. That's why there is no audio record of that. The whole recording of contact data is another term sonar, running tape on a contact is kind of a colloquialism there and that is another recording system. That is normally not used. That would be used um, typically if you had an unexpected encounter with other submarines or whatever and you wanted to try to record that. As a coordinated effort um, to go ahead and get that data, that is not normally done. A normal recording would be a working tape of the operators talking, which is not available because of the biologics. The data, which is sent to fire control as part of the computer interface that should, that would be available.

WIT: Yes. I misunderstood. I thought that you were asking if that recording; it's not like a black box on a aircraft. It doesn't do that.

MR. ROTH-ROFFY: Okay. Thank you for that clarification lieutenant. Who was involved in the conversation with the officer of the deck regarding the failure of that remote display unit located in control?

WIT: Myself and Petty Officer Holmes.

MR. ROTH-ROFFY: And you spoke directly with the officer of the deck?

WIT: Yes.

MR. ROTH-ROFFY: And who actually ah, tagged the equipment out and did all that safety checks on the tag out?

WIT: Which display are you referring to sir?

MR. ROTH-ROFFY: I am referring to the remote display unit from your sonar data?

WIT: The one that shows what we are looking at?

MR. ROTH-ROFFY: Correct.

WIT: Okay. That was never tagged out. That unit was not tagged out. The unit you are talking about the video display unit that wasn't tagged out. The one that was tagged out was the spectrum analyzer. That is the one that can give us class information.

MR. ROTH-ROFFY: Okay. I am sorry. I was confused by that. Who actually tagged out the spectrum analyzer?

WIT: I don't know. I don't know. I don't know. But it was sonar, sonar division.

MR. ROTH-ROFFY: Do you recall when the officer of the deck or the captain ordered emergency deep, what the ordered depth was?

WIT: Can I say that?

LT HEDRICK: Yeah, as long as you say anything less than 800.

WIT: 400 feet.

LT HEDRICK: Sorry that was LT Hedrick by the way.

WIT: Yes, sir. We were going to about 400 feet. 400 feet was ordered depth.

MR. ROTH-ROFFY: And after you reached the depth of 400 feet, did you do a baffle clear?

WIT: I can't answer that question sir. I was not in sonar. I wasn't, I wasn't even in sonar when we steadied up on that depth. Like I said, once we made it to periscope depth, no close contacts, like I said, it has always been ah, a big event for me, I don't play around with that. I may play around in sonar and rib the guys and do a lot of things, but when we go to PD that is a serious evolution. And ah, we went up to periscope depth safely and when the report of no close contacts came through, I was like okay, fine. And at that time the sonar supervisor was like, hey I'm needing to go to the head here and they said emergency deep, we went deep or we were going deep, and I was like I will go get Petty Officer Holmes to relieve you.

MR. ROTH-ROFFY: Could you describe what is meant by the term "no close contacts".

WIT: Yes.

MR. ROTH-ROFFY: As far as range?

WIT: Can I?

WIT: Yes. What does no close contacts mean?

WIT: No close contacts means that there are no close contacts in visual sight or within a specific, or within a range to effect own ship. An immediate threat to own ship.

MR. ROTH-ROFFY: What is that range?

WIT: Anything inside a thousand yards, I would say.

LT HEDRICK: Point of clarification again. LT Hedrick, it is easy to speculate that range on visual from sonar.

WIT: Yes, sir.

LT HEDRICK: Um, we've already discussed how you go about getting a range on one leg of data and how none of that ranging techniques were precise, they are all estimates involving assumptions. Typically what the sonarman should be trained to do, I don't know what happened on the GREENVILLE, but the sonarmen should be trained to--close contacts as you were looking for very bright traces showing up on your track. Brightness representing strength of a contact. In general,

louder contacts are closer and that is a very general statement and that can be exceptions to it and a lot of it is drawing on the experience of the operators. That is why the supervisor is always so more experienced that the OP, rather than the people in front of him. So, it is an assessment made the qualified watchstanders whether or not they have a new contact as the vessel is coming shallow. Whether or not that poses a collision threat and merits warning the officer of the deck.

WIT: Yes.

MR. ROTH-ROFFY: Okay. So it is essentially an indication of brightness, a bright indication on the sonar display unit?

LT HEDRICK: Also, as to the nature of the sound through the headphones coupled with the nature of the environment and the ranges that you have been watching contacts at in the recent past.

MR. ROTH-ROFFY: And essentially he would be looking directly ahead of him?

WIT: Periscope depth, yes.

LT HEDRICK: Focusing his attention directly ahead of him. The intent is to inform the officer of the deck of a collision threat.

MR. ROTH-ROFFY: Okay.

CDR CACCIVIO: Excuse me. I have a question for Mr. Roth-Roffy. Are you, was the, was the intention of your question to get the sonar operator we are questioning; was it your intention to get his prospective of what the range appeared visually?

MR. ROTH-ROFFY: No, I was just trying to get an understanding of what was meant by the term "no close contacts". How would that be determined?

CDR CACCIVIO: Okay. Because - - - -

MR. ROTH-ROFFY: From sonar perspective.

CDR CACCIVIO: Okay, good. Because the term no close contacts from ESM, no close contacts from OOD, and no close contacts from sonar are all different report, the same report, but they are all conveyed differently.

MR. ROTH-ROFFY: Right, I was just trying to get from sonar, what is the interpretation of no close contacts. I think I understand now. I think that was my last question. I would now like to pass the mike to Mr. Bill Woody.

MR. WOODY: This is going back on your background as a sonar supervisor, a sonar supervisor. You looked at the log this morning and you determined quickly that there was no range information, ah no screw blade information in the log. Is that something a supervisor normally looks at? To see if you are obtaining this information as you go along?

WIT: The sonar supervisor should look at it. I, that is another pet peeve of mine. If you have a contact in ATF, or if you hold a contact, you have to try to get as much information on this contact as possible. That way in case he goes into the baffles and you don't pick this guy up again for 20, 30 minutes you want to know that Sierra three is the same guy again. And even though we go through Sierra numbers, we can pick up the same guy with three or four different numbers. Sierra numbers are cheap. That is a common phrase that we use. Sierra numbers are cheap, just pick it up, then you know we will reclassify the guy, but ah, we train ourselves to to be good at what do and that this is definitely this contact because I saw that he had a crooked "S", you know that this blade was, you know I am being extreme, but he has three teeth on this blade. You know, we want to know that we had the same guy again. And yes, that is something that we always do and I know that I watch what we are doing.

MR. WOODY: Okay. Now you mentioned that um, now we are going back to the charts um, does sonar ever use the charts for classification, for example you know that you are in a location of land, do you ever use it to judge a contact because it could help sometimes? You think it might be opening, but there is land over there, did you do anything like that?

WIT: No, sir.

MR. WOODY: You don't.

WIT: No. We use the charts specifically for navigational purposes and to give us more or less what kind of contacts we will be picking up. Whether they are fishing vessels, merchant vessels, or whatever. I mean on every chart, everything is clearly labeled, merchant traffic lane, or submarine transit

area, or submarine OP area, or buoy field. I mean, whatever is known out there in the water, it's charted. So we want to know more of less what is there.

MR. WOODY: Going back to the time that you were on watch. The person on the workload stack, that was, was it Emmons?

WIT: Yes, it could have been Emmons or Anderson at either time.

MR WOODY: What? Because you said that Anderson was on the fathometer?

WIT: Yes.

MR. WOODY: And did they change back and forth?

WIT: Yes. People rotated through. It could have been anyone of the guys at any point in time.

MR. WOODY: Along this line, now you have Rhodes who was a unqualified watchstander and who was on the fathometer at that time? This is the watch that followed yours? Was he a qualified watchstander?

WIT: Yes. That was Petty Officer Anderson.

MR. WOODY: Anderson. Is this the same Anderson that was on your watch?

WIT: Yes.

MR. WOODY: He could have - - - -

WIT: They could have rotated at any point in time.

MR. WOODY: Thing about it is, I have your watches as Holmes, yourself, Emmons, and Anderson.

WIT: Yes. No, Anderson was a fathometer watch. One of the fathometer watches.

MR. WOODY: One of the fathometer watches?

WIT: Yes. Emmons was on watch with me.

MR. WOODY: I was just interested in why you would have Rhodes on the workload stack and an apparently qualified person on the

fathometer. Would that just be for the sake of rotation or other reasons?

WIT: No. Because unfortunately SN Rhodes is not qualified in fathometer either and the first thing that you should be getting qualified is safety of ship. You need to know what a contact is and you need to know and be able to discern hey this is a merchant, trawler, or whatever. This is how you do things-- safety of the ship is paramount and that is one of the things that we emphasize and that's why he was sitting where he was. He wasn't the primary operator. He'll never be, at this level that he is at now. He is not going to be trusted to be tracking somebody, because he could be pick somebody up from a different bay, he'll pick up a contact in the baffles.

MR. WOODY: Was there enough sonarmen onboard. You said that you thought there was eight onboard. Was there enough to have a person behind SN Rhodes at all times or would this have taken some people off reassignment off watch to come back in?

WIT: Probably would have taken some people off reassignment off watch to come back in.

MR. WOODY: Okay. You gave a nice discussion on the BT trace, I don't think we have to discuss that. I think that is all I have.

MR. STRAUCH: Yes this is Barry Strauch again. Before I forget. Would you just go through what time you went to sleep and what time you got up the night before the accident?

WIT: The night of the accident, or the morning of the accident muster on station was around 5:00 A.M. and I remember getting to bed early. I am typically an early riser anyway. And ah, I don't have a problem getting out of bed and getting going. That was, this was what? The accident happened on Friday, so Thursday night I went to bed. Wednesday night, Wednesday evening I had karate class, I worked out. I worked out that morning on Wednesday, so yeah, I worked out on Wednesday and I had a full day on Thursday. I went to bed, I went to bed at roughly 8:00 P.M.

MR. STRAUCH: Okay and the night before was about the same amount of hours?

WIT: No, the night before, I was, I got home around five. I didn't have karate class that night so I didn't work out. It was an easy day.

MR. STRAUCH: Alright. So how well did you consider yourself at the time?

WIT: Oh, I was awake.

MR. STRAUCH: Okay. Um, of the different skills that I heard, different abilities that I heard that a sonar operator needs; apparently you need good hearing, good vision, is that all true?

WIT: Vision, oh no. If you can see you can be a sonar tech.

MR. STRAUCH: What is the most important attribute, in your opinion that a sonar operator needs to be good?

WIT: To be ah, you have to be open-minded. You have to be able to express what you hear. I mean ah, if I crunch up this Styrofoam cup right now what is it going to sound like to you and what it sounds like to him may be completely different. You have to be able to vocalize what you are hearing.

MR. STRAUCH: Can you take two sonar operators of equal experience and equal training, do what you just did, could you get two different opinions of what they heard?

WIT: Maybe. And that is about as good as it is going to get. Probably.

MR. STRAUCH: How much interpretation is involved in your job?

WIT: Not much.

MR. STRAUCH: Okay.

WIT: Not much really. I mean you gotta, if you have a contact, you have a contact.

MR. STRAUCH: But if you take two equal sonarmen, you cannot assure me that they can hear the same thing the same way?

WIT: Yes.

MR. STRAUCH: Sounds like there is a lot of interpretation in there?

WIT: I made a, I made a statement the; yeah that is true. For example if you hear a buoy chain, it may sound like a roll of quarters to somebody and that guy might say no those are chains. It just depends on the operator. It depends on the operator.

MR. STRAUCH: Okay. There were three operators on duty at the time?

WIT: There were two operators and one supervisor.

MR. STRAUCH: When they hear something, do they all have to agree on what it is?

WIT: No.

MR. STRAUCH: How does it work?

WIT: The call is made by the sonar supervisor on what it is.

MR. STRAUCH: And what if the other person disagrees with the sonar supervisor?

WIT: He is not as senior as the sonar supervisor. It is his call.

MR. STRAUCH: Does that happen?

WIT: Does that happen? Yeah.

MR. STRAUCH: Does it happen often?

WIT: Yes.

MR. STRAUCH: How often?

WIT: I think this is, I think this is biologics. That is not biologics, that is a contact.

MR. STRAUCH: How do you know who is right?

WIT: The supervisor is right.

MR. STRAUCH: Because he is the supervisor?

WIT: Because he is the supervisor, the one with the most experience on watch. Yes.

MR. STRAUCH: Whoever is the most experienced, that person is always right?

WIT: No. And I can tell you why, no. Because for example the day that this incident went down, Petty Officer McGiboney is senior to me, but we are both the same rank. He would listen to an opinion that I have a little bit more. He would listen to the opinion of a second class or a third class with experienced operational knowledge more than a guy who is just, lets say less than a year's time on a stack, on a console. So I mean, even though you are a supervisor doesn't mean that you heard everything that is out there in the ocean. To me everything, to me everything is a new experience, everyday. There are biologics in the Pacific Ocean that I have never heard before, as opposed to the Atlantic, so it just varies.

MR. STRAUCH: So when you talk about being open minded, what you are saying is the ability - - - -

WIT: Being expected to absorb knowledge.

MR. STRAUCH: Okay.

WIT: Some people can't learn as well as others.

MR. STRAUCH: Were any of those people on duty at the time?

WIT: SN Rhodes is, SN Rhodes is a junior guy, but he is not limited in any way. He is, he entered the Navy and he scored very well on the entrance exam. He's a competent young man. He just needs training in the areas that he needs to get trained in.

MR. STRAUCH: Who made the call on the contact when it was sonar's turn?

WIT: Which call?

MR. STRAUCH: The last one that was made, before I guess before you went to periscope depth? Well, I am sorry. You said that they went out of order?

WIT: Right it was - - - -

MR. STRAUCH: ESM, sonar, and radio?

WIT: ESM, sonar, and radio.

MR. STRAUCH: And ordinarily the order is something else?

WIT: That was before I left the fleet to go to shore duty. The GREENVILLE, they do it that way because the first one to know if there is going to be a close contact is ESM watch, because they have the scope out of the water and they can tell.

MR. STRAUCH: At that time, when they went out of the order that you just described. Who answered for sonar?

WIT: The supervisor.

MR. STRAUCH: Okay. Was there any disagreement before he said that?

WIT: Disagreement as far as what?

MR. STRAUCH: Whether or not that there was a contact?

WIT: No.

MR. STRAUCH: Did he solicit opinions from anybody else?

WIT: No.

MR. STRAUCH: So if there was disagreement and he didn't solicit it what would have you expected?

WIT: I would have expected one of the operators there to say hey what about this contact. What about this contact. You did not tell them about this contact. If there were another contact out there the operators are going to tell you, sup you didn't pass out this guy and this guy. I mean, they will do that.

MR. STRAUCH: Did that ever happen?

WIT: Oh yes.

MR. STRAUCH: When was the last time that happened?

WIT: Oh wow! It could be, I mean when was the last time. It could be anytime. At anytime.

MR. STRAUCH: It happens often?

WIT: Yes.

MR. STRAUCH: People disagree?

WIT: Of course.

MR. STRAUCH: Well, if there is disagreement, what is more critical, to disagree about something that maybe something is there and you are saying it isn't there or maybe something that isn't there and you are saying that it is there, in other words, false alarm, critical of an actual contact?

WIT: I would error on the side of safety first.

MR. STRAUCH: You would say false alarm?

WIT: Yes.

MR. STRAUCH: Have you seen that happen?

WIT: No. Not that we won't look for a false alarm. We will always investigate but I have never seen where a false alarm hasn't been looked at.

MR. STRAUCH: Okay. Because what you had here was a miss?

WIT: What miss?

MR. STRAUCH: I mean, what you had on the day of the accident was a miss?

WIT: Yes.-

MR. STRAUCH: Somebody missed the contact and - - - -

WIT: No, we were tracking Sierra, we had Sierra 10, 12, and 13. Those were the only three contacts that we had. Now, this contact I don't know where it came from.

MR. STRAUCH: Well there was a certain amount of time that elapsed from the last sonar measurement that you took to the time of the contact and when I asked you how much time had elapsed you weren't really sure, it could be anywhere, 10 to 15 minutes. In your experience, do things change much, is it possible that you took a sonar measurement, saw the way, sounding the way the situation was. You went down and went back

up again. In that time this vessel transitioned to the area, is that possible?

WIT: No, sir.

LT HEDRICK: Point of clarification here, LT HEDRICK. Just to make sure that there is no confusion, Mr. Strauch. I am not sure what you are referring to when you say sonar taking a measurement. The operators are continuously monitoring and listening to the contacts along all the bearings that they can sense. That is a continuos process. You might want to ask whether or not that process was happening. But it is not a, it is not a lock step process. It is not sample the environment, evaluate, go back and sample again. The mechanics of paying attention are being done by the operators constantly. Most of the analysis is done by the supervisor, who backs up his operators due to his experience. That is general sonar process. I just wanted to make sure that you were asking the question that you wanted?

MR. STRAUCH: Thank you. That does clarify it. Was that happening at the time?

WIT: That we were taking a look at the environment?

MR. STRAUCH: Yes.

WIT: At which specific time. On our way up to periscope depth?

MR. STRAUCH: Throughout, was there any point where the operators weren't taking measurements?

WIT: From the time I entered sonar to the accident, I didn't know.

MR. STRAUCH: Okay. There were operators at the stations listening at all times?

WIT: Oh, yes.

MR. STRAUCH: Um, now you mentioned a couple of um, phenomena that could interfere with sonar and this is all new to me. You mentioned water conditions, you mentioned the near field effect. You said that there was no near field effect?

WIT: No, not at all.

MR. STRAUCH: How do you know?

WIT: Because I didn't see it.

MR. STRAUCH: How would you have seen it?

WIT: I would have seen it right on the display in front of me.

MR. STRAUCH: And what would you have seen?

LT HEDRICK: Ah, I don't think you can discuss that until we verify the classification. I think we can say that it is an issue that we train towards and it is an indication that sonar would have if it is not a cut and dry indication.

CDR CACCIVIO: Maybe you can ask him if it is a clearly recognizable display?

MR. STRAUCH: Okay you are shaking your head.

WIT: Yes, it is very very recognizable. You would know it. Could I say that the contact would - - - -

CDR CACCIVIO: Yes you can say that.

WIT: If we had a close aboard contact, he would drown out every other contact we had on the sphere and we would see nothing but him and we did not have that.

MR. STRAUCH: Okay and just to interrupt what you are saying, there would be clear indications of this?

WIT: Yes.

MR. STRAUCH: Just like there would have been clear indications that water conditions would have interfered with the sound and there were no indications of that at the time?

WIT: Yes.

MR. STRAUCH: What other phenomena could mask the sounds or interfere with the sounds?

WIT: You got the environment itself, you got the near field, and you also have if the contact is at a narrow aspect to you. You wouldn't be receiving his signature. I mean, you would see

a noise source, yeah, but you wouldn't be able to tell what he was doing.

MR. STRAUCH: So there are three?

WIT: There are so many. I mean - - - -

MR. STRAUCH: Tell me some others?

WIT: Narrow aspect ah, the guys is in your baffles, you know, you just don't see him because you are not facing that way. Um, he is through the layer, through the sound layer, his sound is trapped in another layer. There is a sound channel in the environment, sound is being funneled away from you, I mean it could just go on and on. Or he is just idling his engines. You know a idling engine is detectable yes, but not at extreme ranges. It just depends. We didn't have any of those classic identifiers. Another classic identifier a contact is close, it is going to go from one bearing to the other extremely quick, it is going to have an extremely high bearing rate and we didn't have that.

MR. STRAUCH: Of these phenomena that you are describing, where any of these taking place at the time?

WIT: No.

MR. STRAUCH: How would you have know?

WIT: They are easily recognizable. They are easily recognizable. Even the junior most operator is going to go, hey that is fast if it is a high bearing rate contact. Why is he going from here to here really quick.

MR. STRAUCH: Okay. Now SN Rhodes, he was in training?

WIT: Yes.

MR. STRAUCH: Who was training him?

WIT: Well the entire division. At that particular time, Petty Officer McGiboney being the supervisor was over him.

MR. STRAUCH: Okay. Who would sign off to say that he is qualified?

WIT: He would have to, see you get what is called a qualification card and then the qualification; every step of your qualification is broken down to smaller steps. Either required reading or a specific evolution that you have to accomplish, specific things that you have to do as well, in order to qualify for a watchstation.

MR. STRAUCH: There are milestones that you have to do?

WIT: Yes.

MR. STRAUCH: It is not a question of interpretation of skill?

WIT: Yes.

MR. STRAUCH: It is that also?

WIT: It is that also. I mean because you can have all the book smarts and still not be able to tell me that this demon straits is a contact and you are saying that it is biologics, you know what I am saying. I mean you are saying that it is biologics, but it is actually a merchant.

LT HEDRICK: A point of clarification, LT Hedrick. Standard Navy qualification procedures which are not significantly changed at the ship level, but are Navy-wide, or at least submarine force wide, the qual card can be thought as a whole bunch of blocks to check off on a list. Not necessarily in order. Many things that you must do. Some of them would be to go talk to senior personnel about different things that you have read up on, talk to senior personnel about guidance in certain books. Some of them would be to perform physical actions. Stand a 6 hours underinstruction watch. Stand a watch while preceding to periscope depth and it will detail all of those. Qualified personnel can sign those off. Different ships have different policies on who can sign off, but it is always a qualified person. Sometimes a senior qualified. Upon the completion of all of that, there is also a written exam that has to be taken and passed and typically review of any missed questions or questions that were answered perfectly. And then there is always a series of interviews which typically would involve the chief of the division, the division officer, and most of the times the department head. For a senior watchstation, for sonar supervisor, those interviews will go all the way up to the commanding officer. For a sonar watchstander, those final interviews are signed off by the weapons officer or the combat systems officer after interviews with the division officer and

division chief and even if it is not on the card, normally the division leading petty officer of the division, will see him before the chief does. Sometimes it is done as a board, sometimes it is done in sequence. It is a very detailed process and very ah, it is not open to a lot of interpretation. Pretty detailed. You will do these things, you will learn these things. And then the board, the questioning environment of the interview is where you can get some interpretation of skill ah, maybe they watch him perform on a watch, maybe they will ask him specific questions that aren't covered on the card that they feel are important.

MR. STRAUCH: That's all true?

WIT: Yes.

MR. STRAUCH: So, it is a very rigorous process?

WIT: Yes, sir. It is not pleasant. (Laughs)

MR. STRAUCH: Have you ever encountered anybody that went through this process even though he really wasn't any good at it?

WIT: Yes.

MR. STRAUCH: How often have you encountered this?

WIT: Not too often. Then again, then again what I think a person should be prepared at maybe different than what you think? My standards maybe higher than a different supervisor. I may, for example think logs, the log is something that if you have a contact I want you to put down as much data as you can about it. You know and some people are like, as long as we have it. You know what I mean. Talking while going to periscope depth. I don't allow it. You know, I don't know anyone that does allow any horseplay during the periscope depth evolution even though we are not jumping around all over the place. I mean, it is a serious evolution.

MR. STRAUCH: But it is not a full proof process. People do fall through the cracks apparently?

WIT: Some do.

MR. STRAUCH: And you worked with some of these people, I guess?

WIT: Yes, but they do get trained.

MR. STRAUCH: And just like the sonar itself there is a lot of interpretation involved?

WIT: Yes.

MR. STRAUCH: You described the ah, the area where this occurred was a high shipping density?

WIT: Yes. There are a lot of pleasure craft, a lot of fishing vessels, I mean Pearl Harbor is a high operating port.

MR. STRAUCH: Where the incident occurred, would that fall into what you described as a high shipping density area?

WIT: Nine miles out of any coastal area is pretty high. And um, I am just going off of what I saw on TV, where it happened. I didn't look at the chart to see where our position was when I walked into the sonar room the second time. Prior to that we were in transit on our way out and diving and doing angles and dangles and I didn't see where we were at the time of the accident?

MR. STRAUCH: Okay. So you saw it on TV?

WIT: Well I saw it on TV, but I don't know how accurate that was. They are twisting everything else up so.

MR. STRAUCH: What do you think, based upon what you saw or read about? Where this occurred was a high shipping density?

WIT: Sir, I was there and I am still confused. The first three days I didn't sleep much, after the accident, I ah, second-guessed myself. I mean, did I miss something. Did I not see something. Did I, and then in light of, could I have backed up the supervisor any more. Should I, should I have let him sit there. You know, all these thoughts rolled threw my head and you know then we got beaten up because we didn't have a work tape running. What would have that prevented? You know, what would that have proved? I still can't rationalize what happened. I don't know what we did. I mean we go to periscope depth, we do a emergency deep, and from the time it took me to run out of sonar, to the cruise mess, into the torpedo room, which was less than two minutes, we collided with someone. I mean, we did a 360 degree visual search and there was nothing there and we blow and we hit someone that we didn't see. I look

at the displays and we are still tracking these contacts. I am like "what the hell happened". I cannot answer that question. I don't know.

MR. STRAUCH: You asked yourself, what could you have done differently? Knowing what you know now, what would you have done differently?

WIT: I probably wouldn't have given up the watch. I probably would have sat there until we pulled in. Is that the right answer. I don't know. Because now I am running into fatigue. Am I really as alert as when I came onto watch? I ah, I mean, I didn't do anything different than I do before. We pick up a contact we track it. We put it in ATF and we say hey we think this guy, we think this guy has a bearing rate as such. We pass this information off to fire control and then based upon the information that they got, it starts to come together. I don't really see him drawing to the left, I see him drawing to the right. You know, all these things come into play. We didn't do anything out of the, the only thing that wasn't the same, was that we had civilians onboard. Did the distract me? No.

MR. STRAUCH: Well, you also had the spectrum analyzer was out?

WIT: Yes.

MR. STRAUCH: Okay. That was also out of the ordinary?

WIT: It is not uncommon for equipment to crash on you. But you can recover. But the spectrum analyzer was tagged out. We knew that was down.

MR. STRAUCH: What did that do to your ability to interpret?

WIT: It just took away a back up. You see the spectrum analyzer is not our primary source of detecting a contact and classifying it. It is done all on the legacy system. Now, we use that as a secondary. So all we do is lose a secondary, the primary was still there.

MR. STRAUCH: What is the legacy system?

WIT: Busy one system.

MR. STRAUCH: Is this the one we have been talking about?

WIT: Yes.

MR. STRAUCH: Okay. I don't have any more questions. Thank you.

LT HEDRICK: If the BQR22 is operational would it have a dedicated watchstander? I am sorry, this is LT Hedrick.

WIT: No sir. It would not have.

LT HEDRICK: When the watch section relieves, does the whole section relieve or do individual people relieve other individual people?

WIT: Individual people relieve individual people, it is not done all at the same time. It is done on a one on one basis. "What do you got", and then you ask the supervisor for permission to relieve.

LT HEDRICK: Do you recall what watchstander was relieved by SN Rhodes?

WIT: Emmons.

LT HEDRICK: Emmons?

WIT: Petty Officer Emmons. I had primary. Emmons had workload share.

LT HEDRICK: Just to help provide clarification for board members and other folks that will listen to this tape, regarding the term "no close contacts". Would you proceed to periscope depth if one of your contacts was considered a close contact, in the term of "no close contacts"?

WIT: No, sir.

LT HEDRICK: No. Give me a couple of incidents where sonar would think that they would have a contact and would make that, well let me change that; if you reevaluated and discovered that one of the contacts was close or you gained a new contact that you considered close on the ascent to periscope depth?

WIT: The supervisor would immediately report or recommend an emergency deep due to close aboard contact. Close aboard contact, recommend aborting periscope depth and now that the supervisor made that report and the OOD has to weigh, based upon what he has already known in the fire control solution, based

upon what he has already seen off the sonar displays, what he wants to do. Does he want to go emergency deep.

LT HEDRICK: Typically how long does it take to make that determination from the time that a watchstander or supervisor sees a significant change in contact parameters or gets a new contact? How long before he says recommend emergency deep if that's his recommendation?

WIT: That is the supervisor's call and it is done right away.

LT HEDRICK: In seconds or minutes?

WIT: Right away - - - -

LT HEDRICK: Right away.

WIT: In seconds. I mean, if he see a contact on the right drawing left, right, I mean clearing over 6, move.

LT HEDRICK: I understand. Does the sonar-training program involve listening to audiotapes of different kinds of contacts?

WIT: Yes, sir.

LT HEDRICK: Okay. Say you have a bunch of junior sonarmen, one year onboard standing basic sonar operator for just part of that time. What percentage of them would you think would properly identify a buoy chain? Just a swag?

WIT: We have ten junior sonarmen. I would say 7 of them would be able to.

LT HEDRICK: Okay. Ah, first class standing sonar supervisor, how many of them would be able to properly identify a buoy chain?

WIT: Hopefully all of them. Hopefully all of them. I would say one would miss.

LT HEDRICK: Okay. Um, I think that serves as a decent illustration. It is kind of hard to say what percentage of folks would get something right. Six guys with one year of training, you get a completely different range of answers then 6 guys with 7 years of training on a second sea tour. That was the point is was trying to make.

CDR CACCIVIO: Let me get for the record that this is your opinion?

WIT: That is my opinion sir. I mean sonar is not an exact science. It is not an exact science. There is no concrete way of being able to tell you yeah, definitely what it is. We tracked, I'll say it, I've tracked ships, surface war ships that I thought were merchants. I'll say it, it is true. I've tracked war ships that I thought were merchants.

LT HEDRICK: And how did you find out that your classification was wrong?

WIT: We saw them through the periscope. I mean that there is no exact science. I mean, it is ah, - - - -

LT HEDRICK: Can sonar determine an exact range of a contact?

WIT: No sir.

LT HEDRICK: Even all this bearing rate analysis and course changing?

WIT: No.

LT HEDRICK: Changing courses at desired frequency for an hour, can't you get an exact range?

WIT: No. No you cannot.

LT HEDRICK: Can you get exact range with active sonar?

WIT: You definitely can. Because you; no you cannot.

CDR CACCIVIO: Point of clarification. What do you mean by exact range?

WIT: I cannot tell you exactly how far that this contact is within 2 feet. I can't do that. I can't tell you - - - -

CDR CACCIVIO: How about with 4 feet?

WIT: No I cannot. I can only tell you that this guy is inside of five six thousand yards. I can tell you he is inside two thousand yards with active. Without active, anything inside of there - - - -

LT HEDRICK: LT Hedrick again, say you evaluate a contact at ten thousand yards. Say you have high confidence in his range. What would be the expected minimum and maximum range that you would expect to see that contact in? With a high confidence that you think that he is at ten thousand. To you, do you think that he would be no closer than what?

WIT: Passively or actively?

LT HEDRICK: Passive.

WIT: If I have a passive ten thousand yards I expect him to be out truly 15 thousand yards.

LT HEDRICK: Right. There is going to be a range. If you tell the officer of the deck I have high confidence that this contact is at ten thousand yards - - - -

WIT: Right.

LT HEDRICK: What is the range that you feel fairly confident that he would be in?

WIT: Oh! If I know that he, yeah that he is at ten, he is at ten. Is that, I mean I don't know - - - -

LT HEDRICK: Let me rephrase the question. You've maneuvered own ship three or four times and several Eklund ranges. You now feel the contact is at ten thousand yards. Do you think that is ten thousand plus or minus a hundred, plus or minus five hundred, plus or minus thousand, plus or minus two thousand. What would you consider a high level of confidence? What kind of range bracket?

WIT: Plus or minus a hundred. If we maneuvered that many times, yes.

LT HEDRICK: A hundred yards. Okay. No other questions.

LT JOHNSON: This is LT Johnson. I have just a few.

WIT: Now really quick. The ranges that we are talking about - - - -

MR. ROTH-ROFFY: Sorry to interrupt here. We are getting near the end of the tape if your line of questioning is going to

exceed more than about thirty seconds we are going to need to stop.

LT JOHNSON: Oh, it is going to be more than thirty seconds.

MR. ROTH-ROFFY: We will stop at this time and change the tape.

(The recorder changed the tape).

MR. ROTH-ROFFY: Okay, we are live again.

LT JOHNSON: You were in the middle of answering.

WIT: LT Hedrick, I think you asked about the ranging. The ranging that I typically do in sonar is based on the sensors that I have and the ranges that we get. If it is outside ten thousand yards that is a good range. Those, those are estimates. All I have is little plastic whiz wheels. I don't have a multi billion-dollar system to give me a definitive, definitive range. So, the accuracy of the range, I can be off as far as five to six thousand yards. You know though, when I am on, if I am saying ten thousand yards and fire control is saying ten thousand yards it is pretty on. But, I mean other than that, I can't tell ya, I can't tell ya yeah this guy is - - - -

LCDR SANTAMAURO: This is LCDR Santoamauro. Would you still say still fifteen. The question to you is "do you think the contact is at ten thousand yards or greater?" Would you be surprised that it was a lot more than plus or minus one hundred yards? Is that still - - - -

WIT: Oh no! I wouldn't be surprised at all. You are asking me if it was greater than ten thousand yards - - - -

LCDR SANTAMAURO: If it was greater - - - -

WIT: Oh, not at all.

LCDR SANTAMAURO: So, we go back to the question and continue. Would you be surprised if it was plus or minus five hundred yards away from your estimate?

WIT: Actually, I would be really surprised then. I am like, yeah. Even with this multi billion dollar system, no. I wouldn't be surprised at all, if they said it was greater, I

wouldn't be surprised at all. If they said it was closer, then I would be like, woo! Yeah, I mean its - - - -

LT JOHNSON: This is LT Johnson. You mentioned that you don't have a multi billion dollar system, but you have a whiz wheel? What information are you putting into your whiz wheel to give you this range information?

WIT: You take in speed.

LT JOHNSON: Who's speed?

WIT: Own ships.

LT JOHNSON: Your speed?

WIT: And then his bearing rate.

LT JOHNSON: Okay, his bearing rate.

WIT: And that gives you the range.

LT JOHNSON: Okay. Um, I want to go back to some questions from over there. Um, we don't, well first of all, have you ever seen a qualified person have his qualification removed from him for poor performance?

WIT: I have never seen it personally.

LT JOHNSON: Have you ever heard of it?

WIT: Yeah, I have.

LT JOHNSON: You have?

WIT: Yes, I had.

LT JOHNSON: So basically once you are qualified, you haven't arrived so to speak and you can never be touched again?

WIT: Yes, sir.

LT JOHNSON: And you are constantly being evaluated for performance?

WIT: Oh, absolutely.

LT JOHNSON: And you made the comment that the supervisor is right because he is the supervisor?

WIT: Yes.

LT JOHNSON: Do you stand behind that?

WIT: Not at all.

LT JOHNSON: Okay.

WIT: He can be overridden.

LT JOHNSON: By?

WIT: The officer of the deck.

LT JOHNSON: But in sonar itself, it is just the pure fact that he is manning the supervisor position that makes him right?

WIT: No, he is not a deity. No.

LT JOHNSON: Okay. You stated also that you are certain that no contacts were missed? That you don't know how this guy got there, but you didn't miss any contacts?

WIT: Right.

LT JOHNSON: Um, with that in mind. What is the only way that you can be certain and I understand that the ship is maneuvering, your clearing baffles left, right, your up, down, all around. What is the only way that you can be certain that when you regain a contact, that you actually have a regain? I think you said that Sierra numbers are cheap, I think that's what your comment was. How can you be certain that what you have is an actual regain and not a new contact?

WIT: There is no one hundred percent way to know.

LT JOHNSON: Okay. What is the best data that you would have available to you as a sonar sup to tell you that this is a regain of Sierra 1, I know it because what?

WIT: Frequency information.

LT JOHNSON: Frequency information. Anything else?

WIT: Yes. Frequency, screw blade information.

LT JOHNSON: Screw blade information.

WIT: But that's, that's not always complete.

LT JOHNSON: Oh sure.

WIT: That is not exactly one hundred percent either. You have merchants that have the same screw blade configuration, but they give you a completely different signal.

LT JOHNSON: Based upon your log entries there, and I am going to go into your log and ask you to refer to that. On your contacts, specifically Sierra 12, 13, and 10.

WIT: Yes, sir.

LT JOHNSON: In the absence, and I understand that there is no screw blade information available in the log, nothing was ever logged down. So what would be the, how are they ascertaining that they are regaining these contacts and in effect when they fade a contact that they are not gaining a different contact on the same bearing? Is there any way that they can ascertain that through the screw blade count or anything else?

WIT: No.

LT JOHNSON: So what are they, so what are they using to say it is a regain. What information are we using to designated as a regain?

WIT: Well, if you are tracking a contact the only time that you will lose it is if it absolutely shuts down, fades, or goes into the baffles. These contacts here, the only one that went into the baffles, was Sierra 10. After he went into the baffles, they never regained him, that I know of.

LT JOHNSON: Are you talking throughout that log the only contact that went into the baffles was Sierra 10?

WIT: No. No, that is not what I am saying.

LT JOHNSON: What are you saying?

WIT: What I am saying is if you put a contact in the baffles and you take him out of the baffles. He goes into the baffles

- - - -

LT JOHNSON: Right.

WIT: During own ship's maneuver.

LT JOHNSON: Sure.

WIT: And you clear one hundred and twenty degrees and you pick him back up on the other side of the ship, you know it is the same contact, because you can still see him on the display. Even though, let me draw it out.

LT JOHNSON: So you never actually truly lose a contact when they enter the baffles, you can track them through the baffles?

WIT: No.

LT JOHNSON: Are you for certain?

WIT: No, you cannot.

LT JOHNSON: Do you lose them when they go into the baffles?

WIT: Yes, you do.

LT JOHNSON: How can you ascertain that you are regaining the same contact out of the baffles and it is not a different contact out of the baffles?

WIT: The way it sounds.

LT JOHNSON: Okay. So audible. The way it sounds?

WIT: Yes.

LT JOHNSON: Characteristics?

WIT: Yes.

LT JOHNSON: Alright, I understand. Do me a favor and look at your logbook there and um, give me the approximate bearing drift of Sierra 13, based upon the contact information you have there in your ten-minute intervals.

WIT: In ten-minute intervals?

LT JOHNSON: Or however often you log him on, I know he is in and out, in and out, but I think we got four or five good hits on him. What is your bearing rate? Go to thirty minutes prior to the actual incident? That should give you about 4 pieces of information?

WIT: They gained Sierra 13 at 2233. Then the rate was three five seven. Sierra 13 later, well two minutes later, 2235. They faded him at three five nine. Five minutes later, at 2240, they gained him at the same bearing three five nine. At 2242, only two minutes later, Sierra 13 faded at three five nine. They gained him again at 2250, north zero zero one. At 2312, they have him bearing zero zero seven. And at 2325, he is bearing zero zero nine. He has a right bearing.

LT JOHNSON: Okay, so you are saying that he has a right bearing rate? That's what I have. Now with a right bearing rate, is that a dangerous type of situation? Which is the safer bearing rate, a right or a left?

WIT: It depends on which side of the array he is on. If he is on the right side - - - -

LT JOHNSON: Which side of the array is he on?

WIT: It is hard to say, I don't know what own ship's head is.

LT JOHNSON: We don't have the deck log. We got the deck log information.

LCDR SANTOMAURIO: Ship's heading is two four zero through 2240.

WIT: We were going two four zero, sir.

LCDR SANTOMAURIO: At 2240.

WIT: At 2240, oh shit, he is on the left drawing right.

LT JOHNSON: Okay. Exactly. Um, is it possible you made the comment that no contacts were missed?

WIT: Right.

LT JOHNSON: Is it possible that the collision may have occurred with the contact that you had?

WIT: Seeing what I am seeing here, yeah.

LT JOHNSON: Was it entirely possible that you could have held the contact and actually tracked it and actually hit the contact that you had?

WIT: It is possible. But what is weird. Okay it is possible.

LT JOHNSON: I know that no certainty, but is it; based on the bearing rate information that you have and based on all the information that you have in front of you right now, in recreating it, it is possible?

WIT: Yes.

MR. ROTH-ROFFY: I would like him to finish his statement. This is Tom Roth-Roffy. He said "what's weird is".

LT JOHNSON: Okay. Sorry go ahead.

WIT: I had him on the left. He was on the left, when we went to PD. I remember that. It was twelve, thirteen, we came right. We went to PD. I mean, did own ship turn.

LT JOHNSON: That is what I am going after. This is LT Johnson, Coast Guard. We have the depth, the ship's log, a copy of the ship's log here. So um, are you aware of anything, does the CONN normally notify any of the sonar watchstanders when they are changing courses?

WIT: Yes.

LT JOHNSON: So, if you were in the process of going to emergency deep and a course change would have been ordered you would have been notified of that?

WIT: Yes.

LT JOHNSON: Would a course change during the descent to emergency deep affect your picture?

WIT: Yes.

LT JOHNSON: I don't know what time, you guys have our notes in front of you.

LCDR SANTOMAURO: I have the time.

WIT: I wasn't there though.

LT JOHNSON: You weren't in there during a - - - -

WIT: No.

LT JOHNSON: Okay.

WIT: No. When we went to, when he said emergency deep that's when I left to get him a relief.

LT JOHNSON: Okay. I just wanted you to take a look at the log and look at those bearing rates and what we had, because you are very emphatic about no contacts were missed, we were very prudent, we did very good searches.

WIT: Yes.

LT JOHNSON: I am over crunching numbers too. And I just want to know based on the information that the sonar operator logged was it entirely possible you in fact did not miss a contact, but you in fact held a contact that would have been the one that you collided with? And I understand that it is just a possibility?

LCDR SANTROMAURO: This is LCDR Santomauro. You were clearing, right before you started clearing baffles you were actually on a course three four zero. And then there was a left full rudder and he completely came around to one two zero. In order to clear the baffles. That is what it looks like. Is that what the log shows.

LT HEDRICK: LT Hedrick. The log shows that at 1238, the ship was starting to steady on course three four zero. Shortly followed by an order for a right full rudder to the course one two zero.

LCDR SANTROMAURO: That is correct.

LT JOHNSON: LT Johnson. I don't have any further questions. Thank you.

LCDR SANTROMAURO: So with the head of three four zero, the contact is actually I believe at that point to the right of zero zero zero.

LT HEDRICK: LT Hedrick. For the record there is, the deck log shows what courses were ordered. There is no log entry of

steadying on course three four zero. Which would be a required log entry. This is a manually kept log. I believe the tact three data tapes that are being analyzed will be able to show that data for you. It could be retrieved. This is all what a person writes down.

MR. ROTH-ROFFY: Any further questions. Go ahead.

LCDR SANTOMAURO: This is LCDR SANTOMARUO again. I have a couple. When reports are being made to the CONN on Sierra's 12 and 13, were ranges passed to the CONN as well, estimated ranges?

WIT: Not that I remember, sir.

LCDR SANTOMAURO: But yet you believe that those contacts to be at ten thousand yards or greater?

WIT: Based on the bearing rate that I had at the time going to periscope depth, yes sir.

LCDR SANTOMAURO: With a high confidence?

WIT: Yes.

LCDR SANTOMAURO: But that information was not given to the officer of the deck via the 27MC?

WIT: I don't know, sir.

LCDR SANTOMAURO: Can you tell me why we didn't log ranges if we had a high confidence in them?

WIT: I don't know.

LCDR SANTOMAURO: You don't have any idea?

WIT: No.

LCDR SANTOMAURO: Early you had stated that the ASVDU had gone down on the maneuvering watch and that you reported that to the officer of the deck, is that correct?

WIT: He was the one who saw it, sir. He called sonar out and asked what is wrong with the ASVDU.

LCDR SANTOMAURO: Is that the officer of the deck or the control room supervisor? Where is the officer of the deck at?

WIT: No, I am sorry, the officer of the deck was on the bridge. It had to be the navigator.

LCDR SANTOMAURO: So it was the navigator?

WIT: Yes, sir. He asked us "what is wrong with the ASVDU". So if he was the control room supervisor, then it would be him.

LCDR SANTOMAURO: Okay. One of the other factors that came out with the interview of one of the other Japanese personnel that stood watch in the engine room is that and the question that I had asked him was specifically "when he was in the engine room did he have a need to wear hearing protection while he was in the engine room" and his answer was "no". Which kind of indicates to me, that is kind of surprising, that when you are running a diesel engine that wouldn't bother your ears, which would indicate to me that this ship, which was fairly new, fairly quiet, and with that bow aspect - - - -

MR. ROTH-ROFFY: This is Tom Roth-Roffy. I don't necessarily agree with that assessment. I mean, it is not important whether we agree or not, I mean there is a lot of subjective things to do with hearing and in the old days on the U.S. flag ships, they didn't wear hearing protection on steam vessels and you know they were very loud. It is just an subjective assessment of the noise level, if whether or not you wanted to wear hearing protection.

LT HEDRICK: LT Hedrick. The majority of the noise that a modernized submarine is capable of sensing in the water is - - due to the propeller churning up the water as it rotates or vibrations transmitted through the hull from machinery that would be direct coupled machinery, the amount of noise that would be generated through the air and then through the hull to the hydrophones is virtually nonexistent.

MR. ROTH-ROFFY: Thank you for that.

LCDR SANTOMAURO: That is all I have.

MR. WOODY: I will ask these personal questions. Bill Woody, NTSB. We always ask a few personal questions in every situation like this. For example, your age?

WIT: I am thirty years old, sir.

MR. WOODY: Your height and weight?

WIT: I am 5' 11" and I weigh about one hundred and seventy five pounds.

MR. WOODY: Are you in good health?

WIT: Yes.

MR. WOODY: Are you taking any medications prescribed by a physician?

WIT: None.

MR. WOODY: Do you do any self-medications?

WIT: No.

MR. WOODY: Such as for sinus?

WIT: No, sir.

MR. WOODY: I see you wear glasses. Are you eyes corrected, 20/20?

WIT: Yes.

MR. WOODY: Okay. And you prepared a 72-hour history, which you said that you would forward to us.

WIT: I will fax that.

MR. WOODY: And the last question. Have there been any bad events in your life such as real bad news of a depression nature or has there been any good news of an exhilarating nature? Any big life changes, say in the last month?

WIT: No, sir.

MR. WOODY: Okay. Thank you very much.

MR. ROTH-ROFFY: Okay. This is Tom Roth-Roffy back. Petty Officer Reyes I would like to give you my business card and during the next couple of days, if anything occurs to you that you would like to share with me or the investigating team I

encourage you to please give me a call. After you have had time to reflect on your answers that you have been asked. If anything that you would like to add to what you had already told us, I would sincerely appreciate it if you would call me. Time is about 1203, and that concludes are interview of Petty Officer Reyes.